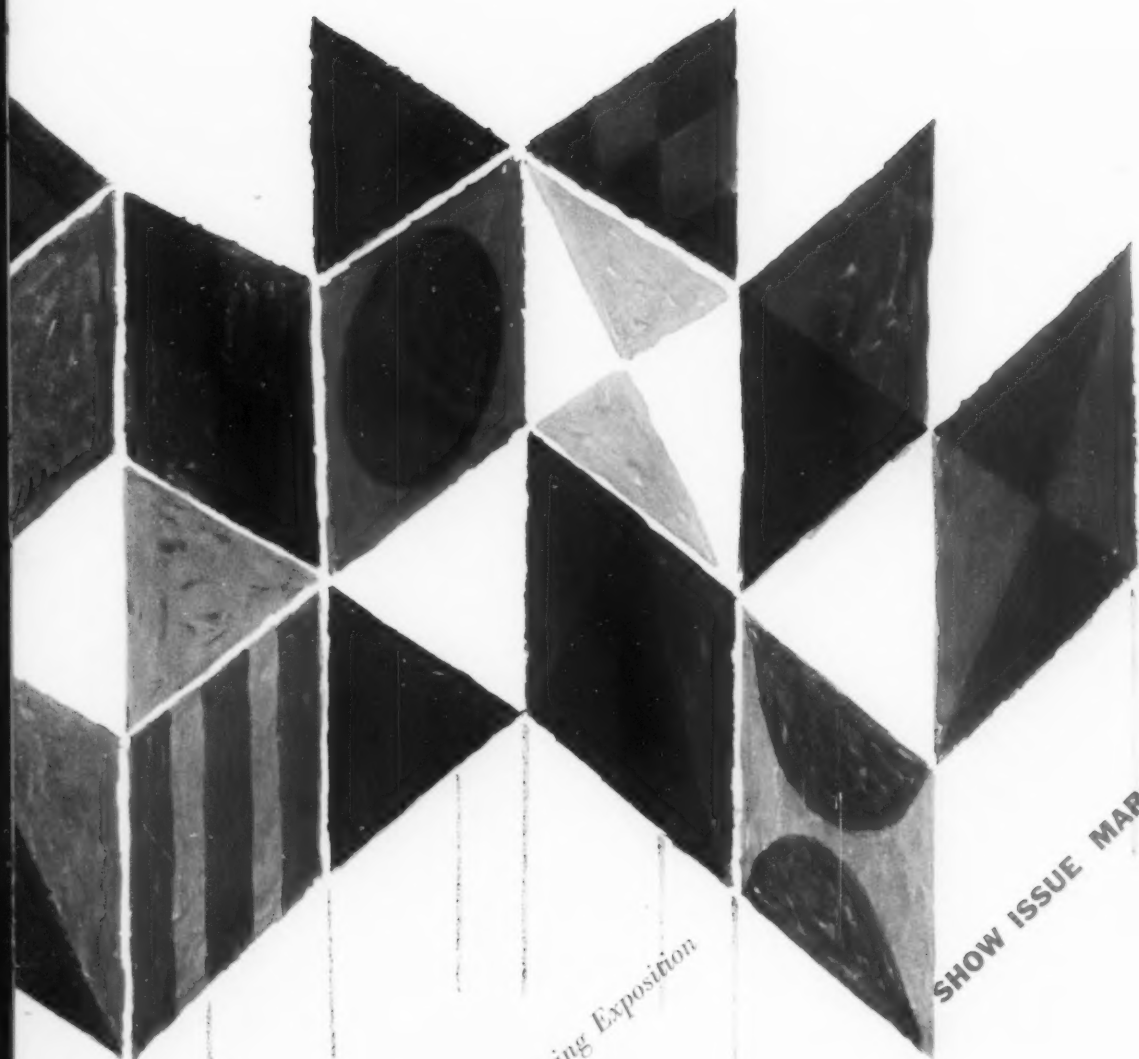


# MODERN PACKAGING



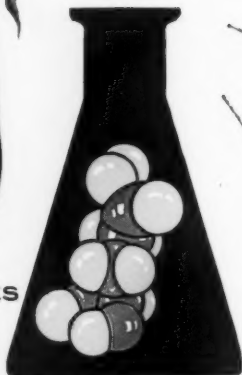
**COMING:** The 29th AMA Packaging Exposition

**SHOW ISSUE MARCH 1960**





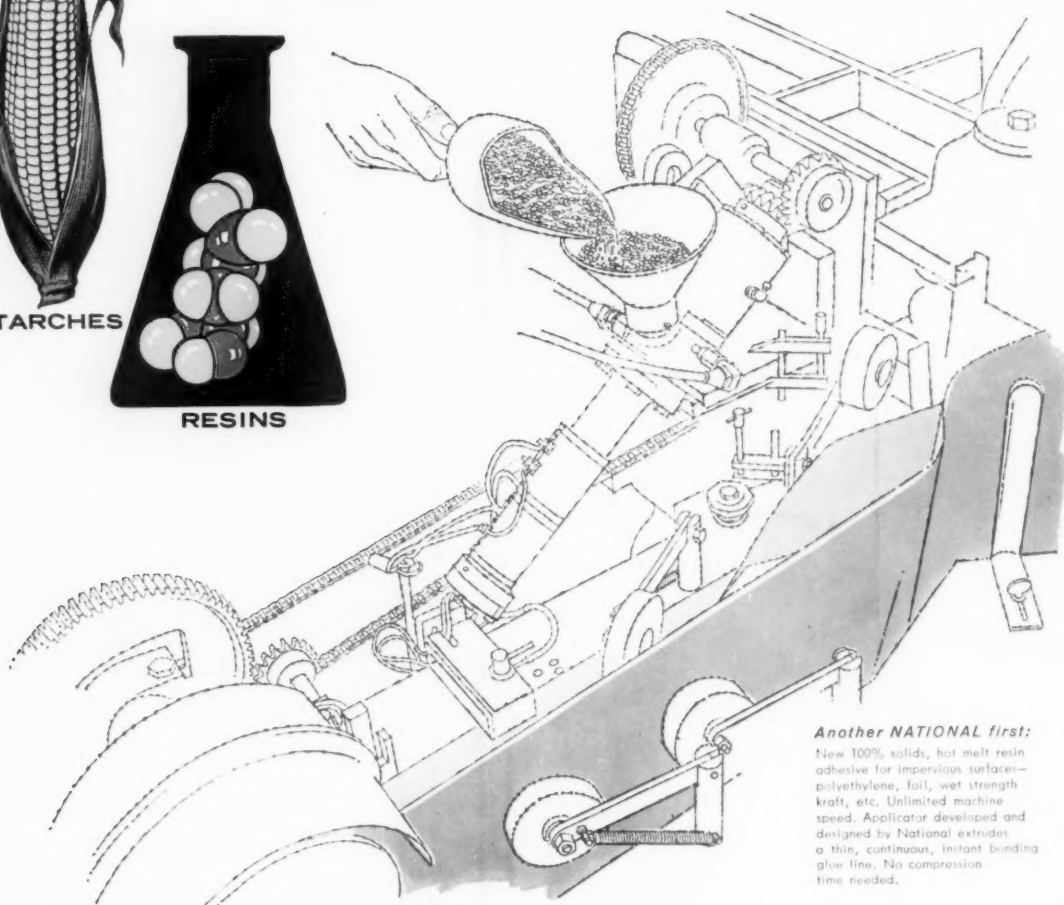
STARCHES



RESINS

# «Cross Pollination»

GENETICS + SYNTHETICS + ADVANCED THINKING



**Another NATIONAL first:**

New 100% solids, hot melt resin adhesive for impervious surfaces—polyethylene, foil, wet strength kraft, etc. Unlimited machine speed. Applicator developed and designed by National extrudes a thin, continuous, instant bonding glue line. No compression time needed.

## Creates basic advances in Package Making

The genetic "cross pollination" of hybrid corn to produce unique strains . . . and the chemical "cross pollination" of corn starch to produce unique starch derivatives . . . plus "cross pollination" with vinyl acetate polymers and copolymers in emulsion form . . . have given NATIONAL complete flexibility of formulation in creating new and unique starch and resin adhesives for packaging.

That's one great advantage.

An even greater customer advantage is NATIONAL's un-

matched technical service. It's based on the "cross pollination" of our advanced thinking in adhesive research and our broad technical field experience.

This unique "cross pollination" of genetics, synthetics and advanced thinking has resulted in a wealth of know-how, not generally possessed by individual packaging companies.

NATIONAL's "cross pollinated" technical service is available for the asking . . . to help build product features that become decided competitive advantages for you.

Visit us at the  
Packaging Show, Booth 334

# National

STARCH and CHEMICAL  
CORPORATION

750 THIRD AVENUE, NEW YORK 17, N. Y.



# WALLPAPER... ALL paper



## VITAFILM GUARDS IT BEST!

If you're handling any type of paper product, take a good look at this package. It's further proof that, for glamour and protection, no other transparent film can equal VITAFILM.

This unique Goodyear film provides an unclouded view of the entire color and pattern range. It's strong and tough, makes a dimensionally stable wrap.

What's more, VITAFILM heat-seals under a wide temperature range to form an airtight weld. No broken packages — no spilled contents. VITAFILM adapts easily to automatic packaging machinery and prints beautifully, too.

If you're packaging cups, plates, napkins, stationery or you name it — you'll find it profitable to investigate VITAFILM now. Just drop a line to Goodyear Packaging Films, Dept 0-6418, Akron 16, Ohio.

*Vitafilm*

BY

**GOOD YEAR**



Vitafilm, a Polyvinyl chloride—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

The best thing between you and your customer



143 **Approaching the single wall**

The aim is to have all the protection needed for most products in the single wall of the folding carton itself, eliminating overwraps and inner liners. Here is a progress report.

Special interest: foods, drugs, chemicals, cosmetics.

150 **Form-fill-seal in plastics**

A long-time goal in plastic packaging is achieved at a cheese plant in France. In a triumph of mechanical integration, a single machine forms, fills and heat seals semi-rigid polystyrene containers at a speed of 50 per minute.

Special interest: foods, hardware, household items.

152 **Double identity**

How a strong, unifying trademark can help independents in the competition with regional and national brands is demonstrated in a package-redesign program by Quality Chekd Dairy Products Assn. The new design links 121 member firms.

General interest.

154 **Polyester pouch for pigments**

Signifying closer control of problems in the pouch packaging of viscous liquids, Bennett's achieves a tough, low-cost film package for paint colorants by modifying a standard former-filler-sealer.

Special interest: paints, oils, all viscous liquids.

156 **Canned apparel: will it take?**

Nine garment makers have discovered that the standard paper canister offers a handy way for

apparel to be warehoused, distributed, price marked and sold in supermarkets just as easily as oatmeal, eliminating racks.

Special interest: apparel, textiles.

159 **Twin bundle**

Diamond National Corp. halves labor costs and speeds bulk assembly of penny match boxes via a double-bundling technique adapted from the fractional packaging of crackers. Two-stage machine overwrapping enables the boxes to be combined in retail and distributor units.

Special interest: foods, soaps, sundries.

160 **Showdown in Washington**

Time is fast running out on the deadline for compliance with the Food Additives Amendment. But there's growing expectation that food packaging will be rescued from an "impossible" dilemma by action to force a moratorium on the FDA law. An eleventh-hour report.

Special interest: foods, drugs.

164 **Exact count by electronics**

An industrial packager eliminates costly overfilling with an electronic counter-filler. Packaging-cost savings are plowed back into a sales-making package-redesign program.

Special interest: hardware, candy, small parts.

167 **A better boil-in bag**

Boasting significant package improvements, Sara Lee moves into the boil-in-bag frozen-food field with a chicken-entree product. New polyester-polyethylene bag has six consumer-oriented refinements; waxed carton has a tamperproof lock.

Special interest: frozen foods.

170 **How to go to a Packaging Show**

You can get the most from next month's 29th AMA Packaging Exposition at Atlantic City if you follow these tips from veteran showgoers. Also on tap is a three-day Packaging Conference. (Guide to the Show and Conference inside front cover.)

General interest.

172 **Paper-sleeve shipper**

Neither bag nor wrap, Pillsbury's new kraft-paper shipping package carries 24 fibre cans of biscuits safely to market. In conjunction with an automatic

**FRONT FEATURES**41 **Background for Packaging**

Notes, quotes and comments on significant news.

66 **Equipment & Materials**

Suppliers' announcements of new products.

99 **Sounding Board**

We ask the Readers: Is packaging-machine development keeping up with materials development?

123 **World Report**

Abstracts from foreign packaging magazines.

141 **Editorial Memo**

"The question of size."

**MODERN PACKAGING**, Executive and Editorial Offices, 575 Madison Ave., New York 22, N.Y. Phone PLaza 9-2710

Please mail all correspondence, change of address notices, subscription orders, etc., to the above address. Teletype: TWX-NY 1-3063. Cable address: "Breskinpub." Quotations on bulk reprints of articles available on request.

Contents copyrighted 1960 by Modern Packaging Corp. All rights reserved, including the right to reproduce this book or portion thereof in any form. Printed in U.S.A. by Hildreth Press, Inc., Bristol, Conn. Member: Audit Bureau of Circulations, Associated Business Publications, Business Publications Audit, Regularly indexed in the Industrial Arts Index. The name "Modern Packaging" is ® Reg. U. S. Patent Office.



# OF MODERN PACKAGING®

loader-sealer, it saves the packager 40% in weight and 20% in costs compared with corrugated cases. General interest.

## 174 Seal for a spray can

"Trial spraying," a storekeeper's bugaboo that has kept Plasti-Kote's aerosol paints off unsupervised self-selection shelves, has been conquered by the simple mechanical addition of a transparent cellulose band that locks the cap to the can. Special interest: all aerosol packagers.

## 178 Push-up confection

Fruit-flavored ice in a tubular polyethylene-cellophane pouch is also pushing up sales for two big brand names. It marks another product-field breakthrough for low-cost film packaging. Special interest: foods, candies, ice cream.

## 184 Cameras nested in polystyrene foam



Bell & Howell and Polaroid adopt expanded polystyrene for protective packaging of delicate cameras. Bonus-benefits are lighter shipping weight, upgraded display appeal and reduced costs. Special interest: clocks, instruments, appliances.

## 188 New way to seal blisters

Three companies find that a new technique for sealing thermoformed packages not only doubles closing speeds, but also produces a more decorative container edging. It involves special serrated dies which interrupt the seal line every 1/8 in. Special interest: all blister packagers.

## 192 Polyethylene molded in miniature

Morton Salt's hinged-lid polyethylene shaker, printed and filled at high speed, costs no more than the company's fibre can. But it is a far superior barrier to water vapor. Special interest: condiments, foods, powdered items.

## 196 Bayuk carries the ball

This packager does a sales-building promotional job and saves on point-of-purchase display costs by using the inside covers of Phillies cigar boxes to call attention to its radio and TV sponsorship of sports events via labels and plastic symbols. General interest.

## TECHNICAL & ENGINEERING

### 201 A study in machine development

Customer demands for greater speeds in cutting and applying pressure-sensitive tape lead 3M engineers to develop a versatile new machine that operates successfully at 2,000 applications per minute. Incorporating a vacuum-wheel applicator, the new unit holds the promise of almost unlimited speed potential. By *Walter C. Larsen*.

### 208 Heat processing vs. permeability

A study of the effects of steam processing on several heat-resistant packaging films has been conducted by the MIT Dept. of Food Technology. The results: Autoclaving has little effect on gas transfer; water-vapor permeability decreases in the polyolefins and increases in polyester films. By *E. G. Davis, M. Karel and B. E. Proctor*.

### 212 Formable paper-plastics

Now available to packagers is a plastic-paper laminate that combines the decorative, protective and design characteristics of plastics with the strength and low cost of kraft paper. It can be heat formed into any package shape. By *V. R. Piper*.

### 216 Questions & Answers

Advice on readers' technical problems.

## DEPARTMENTS

### 162 Ideas in Action

Best examples of package construction and design.

### 180 Packaging Pageant

Pictorial review of noteworthy new packages.

### 190 Cost Cutters

Techniques for reducing the costs of packaging.

### 220 Plants & People

Monthly record of expansions and promotions.

### 260 For Your Information

Association activities, events, book reviews.

### 270 U.S. Patents Digest

Abstracts of new issues affecting packaging.

### 351 Manufacturers' Literature

Checklist and postcard for your convenience.

### 380 Index to Advertisers

Handy way to find the news in the ads.

Modern Packaging issued monthly by Modern Packaging Corp. at Emmett St., Bristol, Conn. Modern Packaging Encyclopedia Issue published as second issue in November by Packaging Catalog Corp. at Emmett St., Bristol, Conn. Second-class postage paid at Bristol, Conn. Subscription rates (including Modern Packaging Encyclopedia Issue), payable in U. S. currency: in U. S., its possessions and Canada, 1 year \$7, 2 years \$12, 3 years \$17; all other countries, 1 year \$25, 2 years \$45, 3 years \$60. Single copies in U. S., its possessions and Canada, 75 cents each (Show Issue, \$1; Encyclopedia Issue, \$3); all other countries \$2.50 (Show Issue, \$3; Encyclopedia Issue, \$6).





# 840% MORE PRODUCTION of Perfectly Cartoned Units!

Royal McBee Corporation, Hartford, Conn., installed their REDINGTON AUTOMAX Cycle Cartoner just a few months ago to carton the three different items in their Roytype typewriter ribbon line illustrated here. Here's their report:

"The machine has done an exceptional job, and has resulted in production increases as follows:

Job A Single Spool Ribbon 230% increase  
Job B Standard Twin Pak 840% increase  
Job C Portable Twin Pak 670% increase"

We've been getting reports along these lines from AUTOMAX users in all areas of packaging. This low-budget, high efficiency machine is proving itself ideal for cartoning Drugs, Pharmaceuticals... Toiletries... Food Products... Hardware... Parts... Household Specialties. Just one operator can produce 40—50—60 packages a minute.

Get the illustrated AUTOMAX folder which gives detailed specifications, method of operation, capacity, etc. Send for your copy today!

## REDINGTON **Automax**<sup>®</sup> CYCLE CARTONER

### LOW PRICE:

Under \$5000—ready to run.

### COMPACT SIZE:

30" wide, 70" long—Weight 750 lbs.  
Caster mounted for easy mobility.

### LARGE CARTON RANGE:

Handles cartons

2" to 7" long

1" to 4" wide

¾" to 2½" thick

### WHOLE JOB CARTONING:

With one operator, AUTOMAX does entire cartoning job automatically... no other machine to buy.



### F. B. REDINGTON CO.

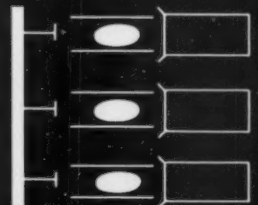
3010 ST. CHARLES ROAD, BELLWOOD, ILLINOIS • Chicago Phone: —Austin 7-4200

Verona, N. J.: CEnter 9-4608

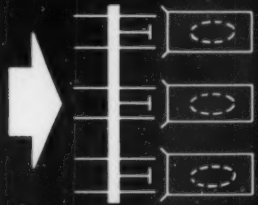
since 1897  
**REDINGTON**  
AUTOMATIC MACHINES for  
CARTONING  
WRAPPING • SPECIAL PACKAGING



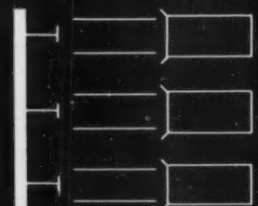
1. Operator places articles in each of 3 troughs.



2. Operator pushes loading handle, filling cartons.

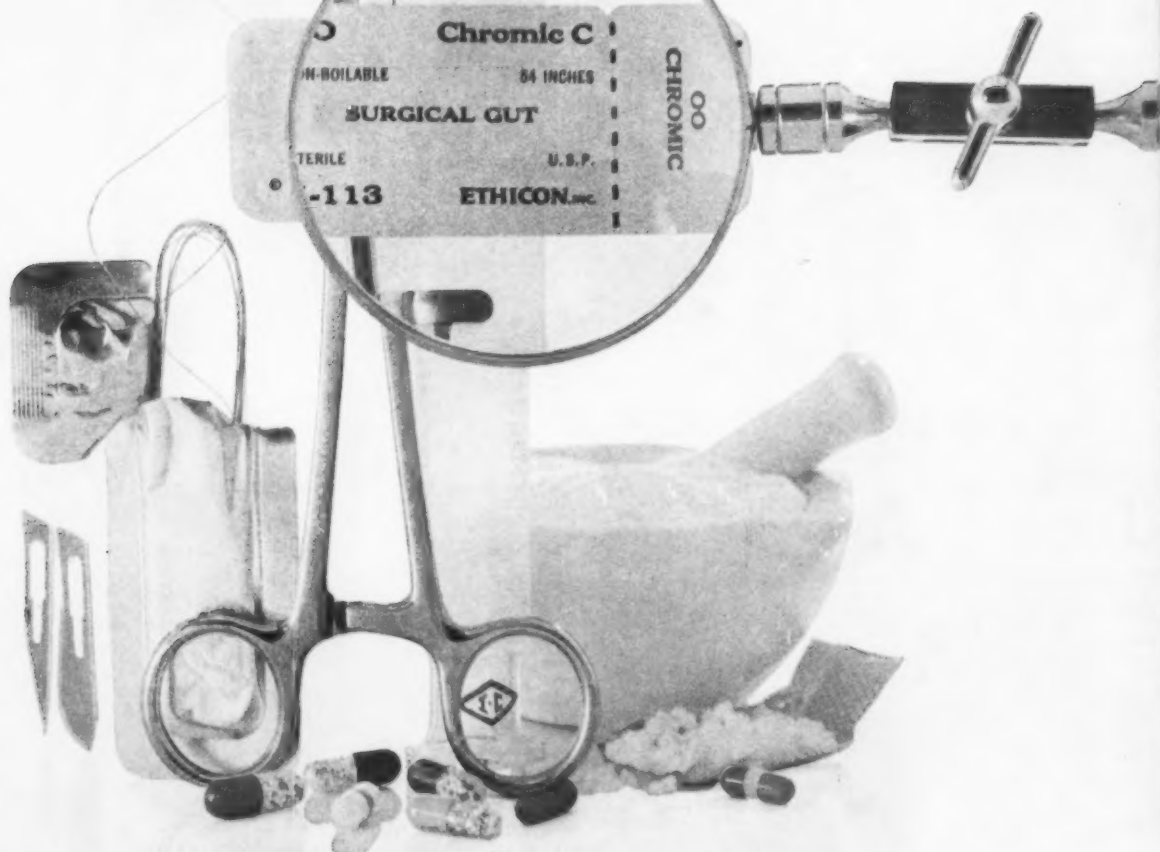


3. Operator returns loading handle to original position and 3 more cartons cycle into loading stations.





Performance is the key to the package that Dobeckmun made of Metalam® for Ethicon Sutures. It performs so well, in fact, that The Packaging Institute awarded it their 1959 Corporate Award at the recent New York exhibition.



*packages for performance*

# DOBECKMUN

The sterility of sutures has always been vitally important. The point about the new Metalam package is that it retains this sterility indefinitely in a foolproof way that removes all risk of accidents and makes the nurse's job easier. Metalam is a lamination of foil and film with qualities that make it ideal for packages of all shapes and sizes requiring the optimum in protection. We are happy this package won the Corporate Award but what pleases us most is that it was the outcome of very close cooperation between Ethicon and us. That's the way we'd like to work with you when you need Packages for Performance by The Dobeckmun Company, a Division of The Dow Chemical Company, Cleveland 1, Ohio • Berkeley 10, California. Offices in most principal cities.





starting point for new



food sales



### Beginning with new

visual approaches, and following through on color photography, color plates, printing, and fabrication—this is a complete Sutherland sales packaging job. And it's really paying off in better facings and faster sales!

Whatever foods you package, Sutherland designers and craftsmen will gladly provide you with new packages for new sales impetus. Send for details.



KVP SUTHERLAND PAPER COMPANY  
SUTHERLAND DIVISION  
KALAMAZOO, MICHIGAN





**Crown Lug Caps are  
TASK-DESIGNED  
to build  
housewife acceptance**



Task-Designed Crown Lug Caps keep your product safer . . . your customer happier. The live rubber ring makes the big difference, because live rubber is Task-Designed for the job. Live rubber rings can take the heat of sterilization, and seal tightly despite minor irregularities in the glass. Live rubber rings

make it easier for the housewife to remove and replace the lug cap—as often as necessary.

Investigate these other advantages of live rubber; longer shelf life . . . less rejects because of ability to withstand stacking pressures. May we send you more details?

**CROWN**



*for cans • crowns • closures • machinery*

**CROWN CORK & SEAL CO., INC., 9300 Ashton Rd., Philadelphia 36, Pa.**

MARCH 1960

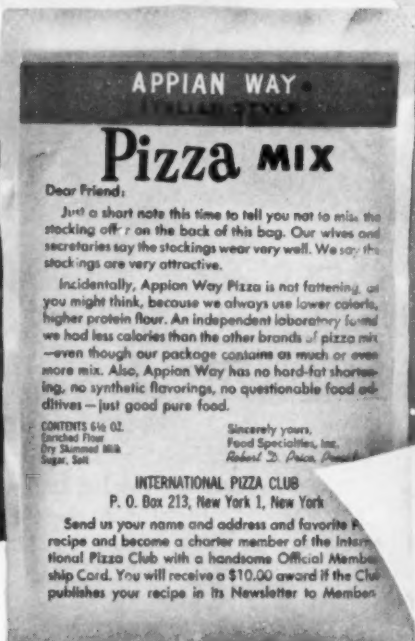
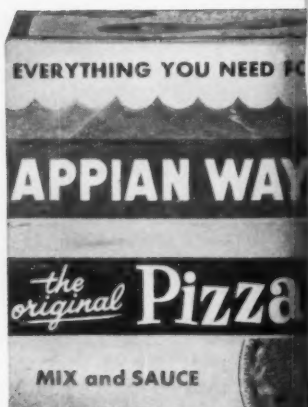
7



# Just Between You and Your Customer

The sales success of any product depends upon the creation of a broad market of loyal customers. One of the custodians of this loyalty is your package . . . the protection it gives your product . . . its eye-appeal . . . its ability to stay clean and neat.

Riegel's business is helping to build customer loyalty, by developing and manufacturing packaging materials that never let your customers down. More than 600 available . . . papers, paperboards, foils, films and combinations . . . waxed, coated, plain, or printed. The right Riegel material helps your sales . . . at a cost that helps your profits. Write to Riegel Paper Corporation, 260 Madison Avenue, New York 16, N. Y.



**Riegel**  
PROTECTIVE  
PACKAGING  
MATERIALS

Appian Way Pizza Mix is protected with a special bleached paper, printed and poly-coated by Riegel, run at high-speed on Bartelt equipment.





THIS SPACE  
RESERVED  
FOR **YOUR**  
UNIQUE  
PACKAGE...

#### FROM CANCO THE LEADER!

If Canco doesn't have the perfect package for your product, Canco will develop it! It may be an adaptation of one of the containers you see on this page. Or it may be a package that's radically new. Either way, Canco leadership assures you of comprehensive packaging service resulting in a better-made package, a better-looking package... one that's convenient to handle and easy to use.

The next time you need a package to put around your product, come to Canco first!

See all these packages... and many more... at the Canco Booth, No. 246, at the National Packaging Exposition, Atlantic City, April 4-7.

#### AMERICAN CAN COMPANY



NEW YORK • CHICAGO  
NEW ORLEANS • SAN FRANCISCO





At Milprint there is no need to compromise on the *right* combination of packaging materials or printing processes. Milprint offers them all... the world's widest choice of films, foils, papers, laminations and extrusions... every necessary printing process! If you have a big packaging problem, with production runs to match, talk to Milprint first. Use the flexible packaging industry's foremost network of plants, research and design facilities. Let us help *you* prove what America's quality-minded merchandisers have been proving for 61 years .....

## MILPRINT PACKAGING GIVES YOUR PRODUCT MARKETING POWER



MILPRINT INC.,  
The World's Most  
Complete, Flexible  
Packaging Source.  
General Offices,  
Milwaukee, Wis.,  
Sales Offices and  
plants conveniently  
located across the  
nation.





## Why we put the bottom of a bottle on the top

Ever drip shoe polish on your pants, trying to get that last shine out of the bottle?

This bottle from Armstrong ends such disasters forever. A tapered shoulder ends in a convenient "Easy Dip Well." The consumer merely tips the

bottle; remaining polish runs down into the well, easily removable.

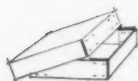
The package fits the hand and has a large, stable base to prevent tipping. For new ideas in packages, call Armstrong Cork Co., Lancaster, Pa.

**Armstrong PACKAGING**

*1860-1960 Beginning our second century of progress*

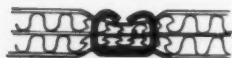
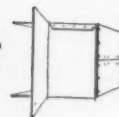
WATCH ARMSTRONG CIRCLE THEATRE EVERY OTHER WEDNESDAY EVENING ON CBS-TV



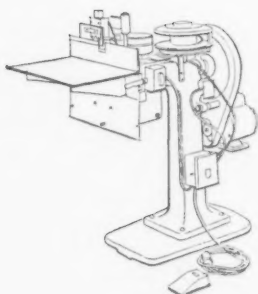


## CLOSURE IDEA BULLETIN

For Users of Fibreboard Boxes

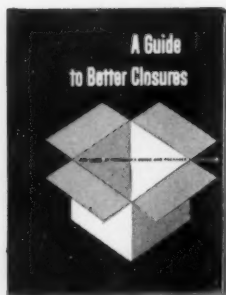


Box components--liners and corrugated media--are all fastened together with the positive clinch provided by wire stitching... clinches all flaps, too...especially important for boxes with wax, lacquer, or other special finishes.



600 full overlap boxes per shift are easily loaded and closed by one man with the HOHT Silverstitcher...can just as easily and effectively close 5-panel folders, and telescope boxes. W1-4 gives full details.

Free booklet, "A Guide To Better Closures"...an impartial report on glue, tape, staple and wire stitching closure methods...points the way toward greater savings, superior product protection...send for your free copy today.



Color comes to wire stitching...increases sales appeal of package. Acme Steel Colorstitch Stitching Wire is chip resistant...available in a choice of 10 standard colors...normally available in 10 lb. coils...25 and 50 lb. coils available on special order. Colorstitch size available from stock is .103" x .020"...other sizes on order. AD-152 gives complete information.

Your Acme Idea Man is thoroughly trained in fibreboard box closure. His know-how is backed by the 75 years Acme Steel has helped industry solve closure problems. Write Dept. MDW-30, Acme Steel Products Division, Acme Steel Company, Chicago 27, Illinois, for information on the complete line of Acme Steel box, book and metal stitchers.



## WIRE STITCHING



# THE LOOK OF LEADERSHIP



To give your quality product the *leadership image*... to make it stand out as foremost in its field... must be a major goal of your entire promotion. *And the first step is the package.* To the consumer's eye scanning the shelf this *is* the product. Pictured here on Reynolds Aluminum Foil is one family of examples selected from the long roster of brilliant successes in Reynolds Wrap Aluminum Packaging. Does your product have a place on this distinguished list?



## SEAL HELPS SELL!

Proclaim the fact that your product has the quality protection of Aluminum Foil... it pays! Tell the story on your package, too... with the Reynolds Wrap Aluminum Packaging Seal. Used on more and more products, known to more and more shoppers... surveys prove this Seal helps sell!

PICTURED ABOVE WITH REYNOLDS WRAP... FINE PRODUCTS OF ARMOUR AND COMPANY

*Look to the Leader in Foil Packaging*

**REYNOLDS  
ALUMINUM**





## PACKAGING LEADERSHIP

As a leader among packaging materials, aluminum foil has two kinds of advantages... protection and display. And Reynolds has gone farthest in developing both. Reynolds has pioneered in combinations of aluminum foil to meet special protective requirements...and also in new enhancements of foil's inherent beauty—such as registered-embossing. Production facilities are unequalled... including gravure presses reproducing in up to 8 colors. Whatever your needs—overwraps, liners, pouches, envelopes, containers, folding cartons, labels—call the nearest Reynolds sales office. Or write to Reynolds Metals Company, Richmond 18, Virginia.

See how Reynolds shows on ABC-TV network "BOURBON STREET BEAT" and James Michener's "ADVENTURES IN PARADISE" Monday nights.

**REYNOLDS**  
**ALUMINUM**





Protection  
Plus  
Sales Appeal  
with



## Acetate Sheeting...

by JOSEPH DAVIS PLASTICS CO. This LOXEM safety lock provides extra protection—and the blister pack by Ideal Mounting and Finishing Co., Inc., Long Island City, N.Y. using JODA crystal clear acetate sheeting, provides extra protection for the lock! Packaging with JODA acetate not only guards against shelf and handling wear but improves the entire appearance of the product, lets the customer see what he's buying. It's a major sales aid to any product.

JODA extruded acetate sheets, rolls and film in all gauges — transparent, translucent or opaque — are excellent for vacuum forming. Why not investigate the advantages of JODA acetate and see for yourself how it can help solve your packaging problems.



**JOSEPH DAVIS PLASTICS CO.**

430 Schuyler Ave.  
Kearny, N. J.

Phone  
WYman 1-0980  
N. Y. BArlay 7-6421





**the first glass**

**container to**

**enter your lines**

**will, if it's**

**Tygart Valley**

**quality, be exactly**

**like the last**

**one off the lines**



**Uniformity is the key to Tygart Valley quality in glass containers**



**BROCKWAY GLASS**

COMPANY, INC., Brockway, Pennsylvania  
Sales Offices in Principal Cities

SUBSIDIARIES: Demuth Glass Works, Inc., Parkersburg, W. Va.  
Tygart Valley Glass Co., Washington, Pa.





## Cellu-Craft packaging hatches more sales for Campfire miniature marshmallows

The Cracker Jack Co. hatches new ways with miniature marshmallows . . . discovers they raise salads, cakes, desserts, and beverages to new heights of tempting flavor. To intrigue housewives into trying new ways with these old-time favorites, they nest their "Campfire" salad-size marshmallows in an arresting Cellu-Craft package that tells, sells, and protects.

A Cellu-Craft packaging expert is qualified to help you hatch more sales, too. Just a line or phone call will do!

**CELLU-CRAFT**  
PRODUCTS CORPORATION

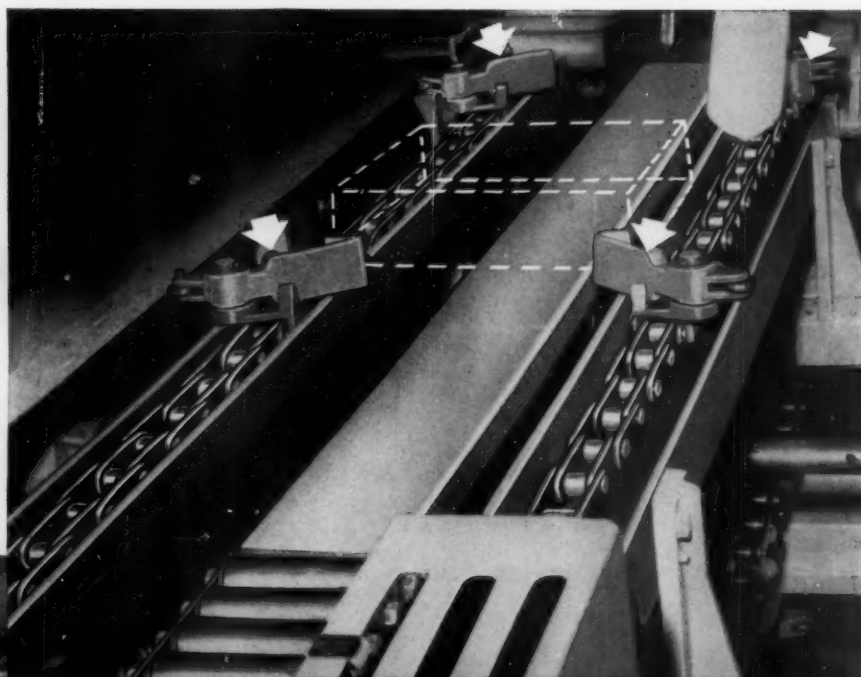
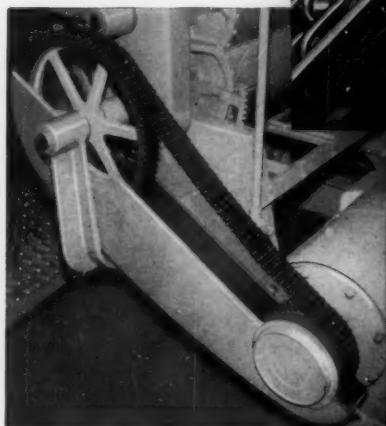


General Offices & Plant: 1401 4th Ave., New Hyde Park, N. Y., PRIMROSE 5-8000. Sales Offices in principal cities.  
DESIGNING of flexible packages. PRINTING: Glolux® Gravure, Process, Line & Tone Flexography on Cellophane, Polyethylene, Glassine, Extrusion Coatings, Laminations, Foil, Acetate, Pliofilm. CONVERTING: Rolls, Sheets, Bags, Pouches, Envelopes.



Parallel strands of DIAMOND Roller Chain are equipped with standard attachments adapted for pushing Cēpacol cartons through primary sealing process.

DIAMOND multiple strand, power transmission roller chain operates over 32 and 76-tooth DIAMOND Sprockets on one of Merrell's Z-bar blenders. The 32-tooth sprocket turns at 125 rpm.



## Cost-cutting Cēpacol production lines depend on **DIAMOND** roller chains

● Automated packaging operations help The Wm. S. Merrell Company reduce the manufacturing cost of its well known Cēpacol oral anti-bacterial products. For power transmission and for synchronized conveyor movements Merrell used DIAMOND Roller Chain. For Cēpacol, as for many other industries and products, DIAMOND durability, accuracy and dimensional stability—its long, maintenance-free service life—contribute substantially to the efficiency and *lower unit cost* of production.

Let DIAMOND Roller Chain prove its capabilities to you—in modern packaging operations or wherever *the efficient transfer of power or motion* is a problem. Write for DIAMOND's new descriptive catalogs and engineering data.

For name of your nearest Distributor, look under "Chains" or "Chains, Roller" in your Telephone Directory Yellow Pages.

### DIAMOND CHAIN COMPANY, Inc.

A Subsidiary of American Steel Foundries  
Dept. 621, 402 Kentucky Ave., Indianapolis 7, Indiana  
Offices and Distributors in All Principal Cities

# DIAMOND



# ROLLER CHAINS



# *what's new in* SQUEEZE-TO-USE TUBES?



Polyvinyl tubes by Thatcher, of course! They're soft to the touch, flexible . . . and tough! They open the door to many products not adaptable to conventional thermoplastics. Crystal clear, they display the color and quality of the contents . . . and may well be the package that boosts your sales. Contact Thatcher.



THATCHER GLASS MANUFACTURING COMPANY, INC., PLASTIC CONTAINER DIVISION, P.O. BOX 363, NASHUA, N. H.



# RESINA

*fully automatic*

## FITMENT APPLICATOR

*specially designed*

for the  
FOOD,  
COSMETIC  
and  
DRUG  
industries



MODEL FAB

We manufacture Capping machines for every type of fitment... solid or perforated with or without tabs for exterior or interior use.

Capacity from 20 to 120 fitments and up to 300 per minute depending on fitment and container.



Consult a RESINA packaging and sealing specialist regarding your special problem.

**RESINA** AUTOMATIC MACHINERY COMPANY, INC.  
572 SMITH STREET BROOKLYN 31, N.Y.



### a message from Steve Resina

We at Resina are justifiably proud of the respect we enjoy as one of the major producers of capping machinery in America. From the moment my father shipped his first machine in 1935, Resina has always been a vital part of the technological growth of automation in the packaging machinery industry.

As we enter our 25th year of business, the long list of America's great packagers using Resina packaging machinery attests to our present success and future growth. We rededicate ourselves to develop and supply the packaging machinery that will permit business to bring an even better standard of living to Americans...with better products at reasonable cost.

*Steve Resina*  
PRESIDENT





does the packaging

**fit**

your product?

A package that is right for your product will be *fitting* in many ways . . . in shape and size . . . material and construction . . . design, styling, merchandising, and display features . . . as well as cost. Each of the products shown here has been "custom fitted" with TULOX Extruded Plastic packaging, meeting all of these basic requirements in full measure.

Only TULOX materials and methods provide such complete freedom of choice in shape, size, type, color, and design of packaging that fits the product, not only in the sense of being precisely suited to its merchandising needs, but also in the creation of valuable brand identification.

Furthermore, the cost may be competitively *below* that of less attractive alternatives on a reasonable volume basis. Before you complete new packaging plans, investigate the outstanding advantages of TULOX. Send for literature or write us outlining your project.



**TULOX**

**EXTRUDED PLASTICS, INC.**

SEMI-RIGID SEAMLESS PLASTIC PACKAGES

SEP59

General Offices: Norwalk, Connecticut • Plants: Norwalk, Connecticut • Marion, Indiana

MARCH 1960

21



*New ink-deep labels are seen but not felt!*

**DENNISON THERIMAGE® TRANSFERS CREATE DIRECT-PRINTING EFFECTS AS YOU PACKAGE!**

**They're film-thin!** Therimage Transfers, before application, are much like heat-seal and pressure-sensitive labels in appearance and price. But there the similarity stops. Designs are printed on heat-release-coated paper . . . and the printed legend is transferred from the paper to films, foil and waxed paper by mild heat and pressure. A Therimage Transfer Machine . . . attached to any standard wrapping or bundling machine . . . applies designs as fast as 150 a minute.

**A versatile, economical process!** Current users confirm such advantages as: last-minute application of special prices, premium offers and other variable information . . . over-print cor-

rection of obsolete copy to salvage costly inventories . . . elimination of pre-printed materials when designs are  $5\frac{1}{2}$ " x  $5\frac{1}{2}$ " or less . . . reduced web breakage through use of virgin film.

For complete information, quotations and delivery schedules, write direct to:

**Dennison**

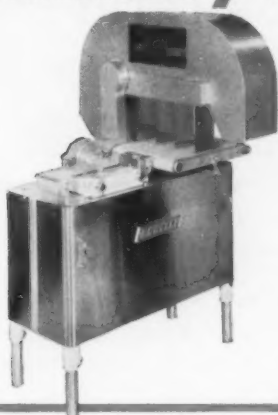
*Helping you compete more effectively*

FRAMINGHAM, MASSACHUSETTS • DRUMMONDVILLE, QUEBEC  
Sales offices in principal cities



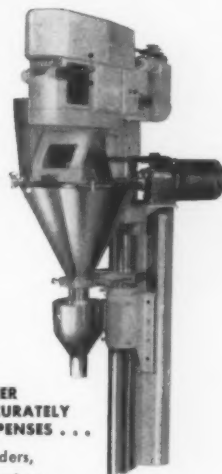
# Machinery for Creative Packaging

Visit Booths 1142-1148 AMA Packaging Exposition



## CHECKWEIGHER . . .

Speeds to 200 pm  
Accuracy to 1/64 ounce  
Weights up to 2 lbs.  
Continuous Motion  
Electronic  
Will handle most  
containers . . .  
open or closed.

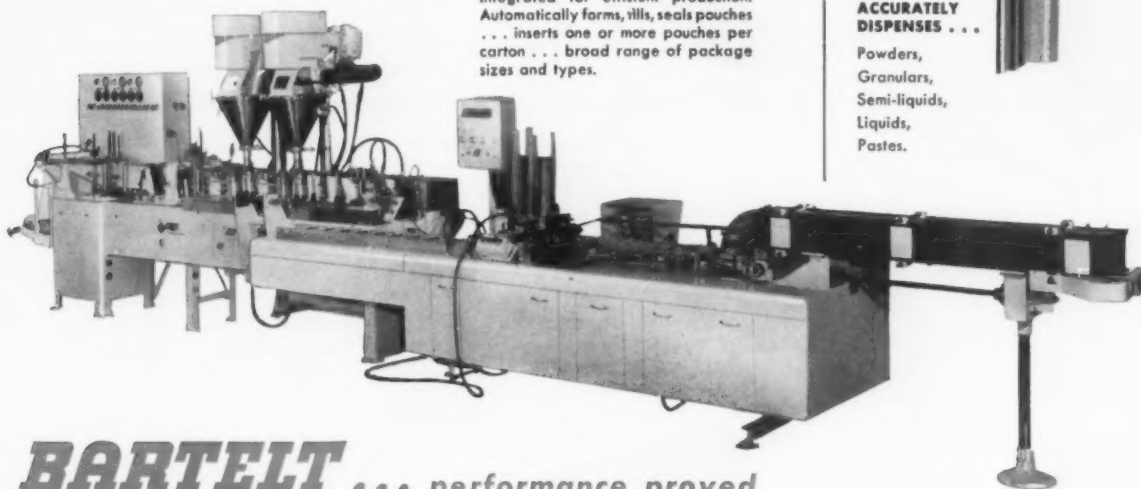


## FILLER ACCURATELY DISPENSES . . .

Powders,  
Granulars,  
Semi-liquids,  
Liquids,  
Pastes.

## A PACKAGING PRODUCTION LINE . . .

Versatile Packager and Cartoner . . .  
Integrated for efficient production.  
Automatically forms, fills, seals pouches  
. . . inserts one or more pouches per  
carton . . . broad range of package  
sizes and types.



## **BARTELT** . . . performance proved

● **Quality Output** — Bartelt machines consistently provide quality production for many of America's favorite products.

● **Versatility** — Designed for fast change-overs as well as a wide range of package sizes and types; Bartelt versatility is unmatched.

● **Rugged Reliability** — Bartelt machinery has repeatedly been proven capable of meeting the highest production requirements.

● **Minimum Upkeep** — The simplicity, accessibility and ruggedness of Bartelt equipment assures minimum maintenance costs.

● **Custom Engineered** — Each Bartelt machine is designed to meet the customer's specific requirements.

● **Service** — from preliminary analysis of a packaging program, through the complete pre-delivery machine checkout, to the installation-instruction phase directed by experienced Service Instructors, our customers have found that with Bartelt . . . service is a concept.



Where Unfailing Quality Counts

**BARTELT ENGINEERING COMPANY**

1900 HARRISON AVE., ROCKFORD, ILLINOIS • NEW YORK OFFICE: 370 LEXINGTON AVE., N.Y.C.

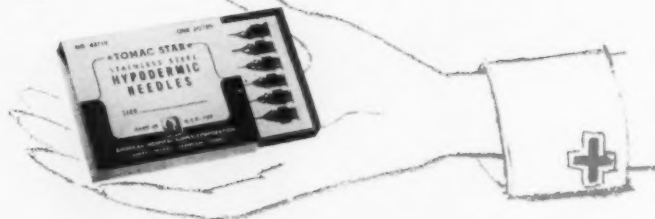


## ROWELL DRUG and COSMETIC BOXES

Many of America's leading toiletries and cosmetics, and finest pharmaceuticals and precision products, are entrusted to fine set-up boxes by Rowell.

Rowell boxes, with the look and the feel of quality, assure maximum shelf-appeal. They protect delicate and precisely fashioned articles as no lesser box can.

Shouldn't your product be in a Rowell set-up box when it faces comparison, or when it undergoes handling? Call or write for a prompt analysis of your requirements.



*E. N. Rowell Co. INC.*  
BATAVIA, N. Y.



**NOW**

**THERE ARE**

**7**

**THERMOGRIP**

**Hot melt adhesive applicators**

**Low cost, compact unit makes instant-set adhesives available to wider range of uses**

Clean, fast, no-waste THERMOGRIP adhesives can now be used in an even broader range of applications with the new THERMOGRIP Applicator Model DN. Compact, low cost, and versatile, the Model DN is the seventh and latest addition to the line of THERMOGRIP applicators for melting and applying instant-set THERMOGRIP adhesives.

Waste is eliminated because cord-like THERMOGRIP adhesive is metered in automatically only as used. Just the right amount of adhesive is applied for each job. Nozzles for the Model DN can be varied to provide wide variety of application patterns: round beads, wiped or thinly wiped wide bands, narrow bands or widely spaced individual lines — in widths from 3" to 1/16". THERMOGRIP adhesive can be applied upward or downward, or to vertical or angled surfaces.

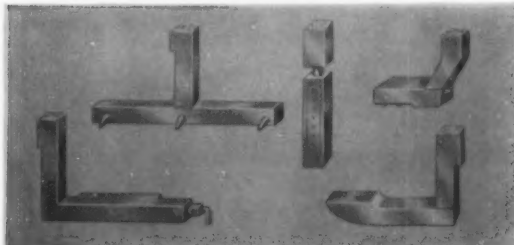
Easily adapted to a wide range of processing equipment, the Model DN THERMOGRIP Applicator is used for joining a wide variety of paper, foil, and hard to bond treated surfaces. Applications include side seaming and end closing in bag making, applying of plain paper tapes and many products used in automotive, apparel, food processing, and building industries.

The nozzle illustrated on the applicator is especially designed to produce economical moisture-proof, sift-proof, tape-over-stitching closures for multi-wall bags. For complete information on THERMOGRIP adhesives and applicators send coupon today.



**United**

UNITED SHOE MACHINERY CORPORATION  
140 Federal St., Boston 7, Massachusetts  
Liberty 2-9100



A few of the many nozzle designs available to tailor the Model DN hot adhesive applicator to your job. Other models use wheels to apply desired patterns. Large, medium, and small capacities give you just the capacity you need.

United Shoe Machinery Corporation  
140 Federal Street, Boston 7, Massachusetts

Please send me the following material:

- ☐ Complete information on Model DN
- ☐ New folder on tape closures on multiwall bags
- ☐ New general catalog on Thermogrip adhesives and applicators

Name.....Title.....

Company.....

Address.....

City.....Zone.....State.....



AUTO-VAC's completely automatic production line operates by feeding any thermoplastic material to a Mark IV pressure forming machine where it is formed and stripped. Formed parts, indexed to a blanking press, are cut and stacked. The blanked web is then fed to a scrap chopper.

# AT THE PACKAGING SHOW...

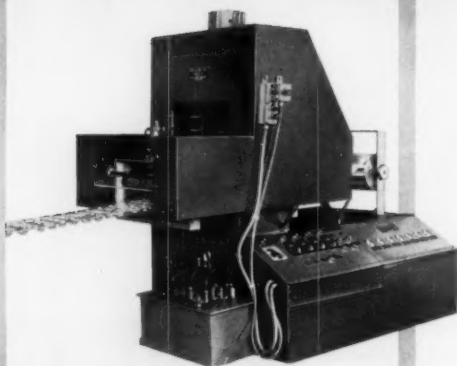
## COMPLETELY AUTOMATIC PRODUCTION LINE

The entire line, including power driven feeder, Mark IV with stripper, blanking press-stacker, indexer and scrap chopper, all designed and built by AUTO-VAC, is only 15 feet long.

**HIGH SPEED AUTOMATIC  
PRESSURE FORMING, INDEXING,  
CUTTING, STACKING,  
AND SCRAP CHOPPING**

**SEE IT AT BOOTHS 1408-1412**

## PRESSURE FORMING



**PRESSURE-VAC Mark IV** — Automatic operation — Forms up to 30 sq. ft. per minute. Platen area 15" x 22" — forming area 14½" x 21½" — depths to 4". Forms any film from .001" to .025" in standard 22" rolls, and sheets from .030" to .125". Forming cycle is completely automatic, with five timers controlling heating, heater dwell, forming, cooling and air blow-off. Remote control permits operation from indexing or cutting station. May be used in completely automated operations or in multi-purpose operation. Complete production changeover may be made in one half hour.

**AUTO-VAC automatic pressure forming machines offer you these ADVANTAGES—**

**Production speeds** 4 times faster than conventional vacuum or drape forming.

**Forms all** sheet thermoplastic material, including oriented styrene, Mylar®, Nylon®, cast acrylic, PVC, etc. ®DuPont trademarks

**Superior distribution** of material in formed products.

**Sharp detail transfer** from mold to product.

**Positive control** of heat and pressure.

**Greater clarity** in transparent packages.

**Dimensional control** to closer tolerances on formed products.

For complete information write or call:

May be obtained by:

- LEASE-RENTAL
- TIME PAYMENT
- OUTRIGHT PURCHASE

Complete information on request.



**AUTO-VAC** *Company*

A DIVISION OF NATIONAL CLEVELAND CORPORATION

1986 State Street Ext., Bridgeport, Connecticut  
EDison 4-9481 • TWX - 568



# Superose SWEETENER

**98% LESS  
CALORIES**  
THAN ORDINARY  
SWEETENING



*Anywhere Sweetening is Desired*

**YOU'RE LOOKING AT A FOIL LABEL  
WITH . . . AN ASTRONOMICAL**



**Rotogravure's Specialty: Boosting the IMPULSE QUOTIENT of Any Product's Packaging . . .**

Impulse Quotient: The ability of a product's packaging to give millions of impulse-buyers . . . the urge to buy. Some packages have it — others don't. Of course, eye-appealing Roto Foil helps a lot . . . impulse item or not. It has a flair for almost flirting its way off the crowded store shelves of America.

Proof of Rotogravure's success in producing High I.Q. labels: The record sales gains enjoyed by so many Rotogravure customers. Suggestion: For sales-sparking printed labels on all types of material . . . from design to finished product . . . speak to the man from Rotogravure. He knows how to help you press the impulse-buying button.

**Rotogravure has a unique production policy of NO MINIMUM RUNS.**

## SALES REPRESENTATIVES:

FRED C. STROUT  
P.O. Box 5079  
Minneapolis 6, Minn.

ANDREWS & COMPANY  
19015 Van Aken Blvd.  
Shaker Heights 22, Ohio

JOSEPH T. CARDELLIO  
16042 Blackhawk  
Granada Hills, Calif.

ROGER D. GUSTAFSON  
1409 Westacre  
Peoria, Illinois

L. F. ILENI HADASEK  
10600 E. 79th Terrace  
Kansas City 33, Mo.

# ROTOGRAVURE PACKAGING, INC.

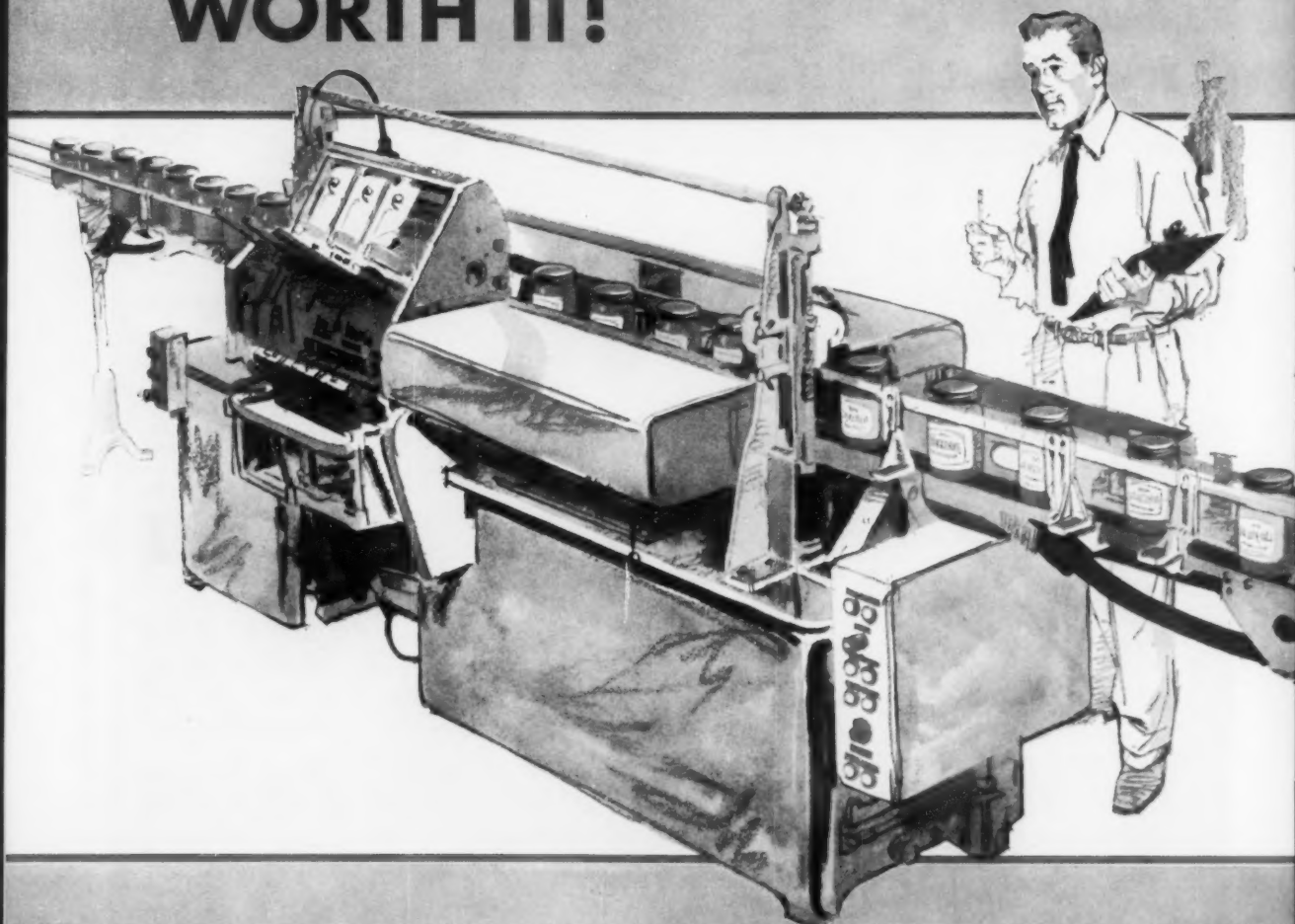
ADDISON, ILLINOIS

PHONE: KINGSWOOD 3-9555



# "Comparison

**THE WORLD SUPER C.M.  
COSTS MORE . . . AND IT'S  
WORTH IT!**



Test after test . . . in plants of all kinds prove that the WORLD Super C.M. is the most versatile labeler made! That's a strong statement, but we think the facts on these pages back it up. Why not ask your labeling superintendent to compare your present equipment?

#### **WHY PAY MORE? . . .**

Basically to protect your labeling operation, *not just for the present, but for long range needs too.*

Only the Super C.M. offers you this protection against size changes . . . increased speed requirements or new labeling ideas.

On a straight line amortization basis the Super C.M. actually *only costs pennies more per hour and repays you dollars more per hour.* The results more than justify the means. Ask your WORLD Sales Engineer for a specific proposal on your operation. No obligation, of course. We'll be happy to let the facts speak for themselves.



# proves it!"

SPEED	VERSATILITY	LUBRICATION	ACCEPTANCE
Models are available for speeds up to 320 bottles per minute.	Any size or shape of container can be run on this machine now or at any future date. Tapered tumblers, bell-shaped containers, flats, rounds, squares, what have you—anything that can be handled by machine can be handled on the Super C.M.	A built-in timing system automatically lubricates all bearings on a predetermined basis —no danger of breakdown through a lubrication failure.	Economic has over 100 machines of this type in actual field installation and operation. The most widely accepted machine in the packaging industry today.
LABOR SAVING	INSPECTION	ADAPTABILITY	LABEL APPLICATION
You can put two WORLD Super C.M. Labelers back to back on adjacent packaging lines (right and left hand) and run two machines with one operator.	The WORLD Super C.M. is an inspector assuring you that a bottle or jar with a cocked or misapplied cap cannot go out to the trade . . . additional insurance that your product can never spoil because the cap is not properly applied.	Suppose an odd shaped label might be used as opposed to one that is rectangular. Again, the Super C.M. gives you positive assurance that you can handle any size or shape label within the range of the machine.	Label application is made in the center as opposed to the end, thereby reducing the effect of off-standard glass or labels to an absolute minimum. An advantage no other machine offers!
ACCESSIBILITY	PREMIUM ABILITY	AIR OPERATED WIPERS	LESS OPERATOR TIME
The label holder is in front of the machine not in back, eliminating the need for the operator to duck back and forth under the machine conveyor.	If your Sales Department decides to run a premium sale requiring a stenciled glue pattern so that the label will have a tear-off strip on it, you can run the glue pattern required.	The WORLD Super C.M. Labeler with air-operated wipers permits you to compensate for all off-standard label stock by allowing you to increase or decrease the pressure while running.	Case studies show as much as three extra operator hours per day can be spent on other things since the man no longer has to hover over the labeler to make sure it will operate and function properly.
AUTOMATION	AMBIDEXTROUS	MAINTENANCE	REPAIR PARTS
The Super C.M. has the ability to sense being out of bottles, (Air-O-Matic Drive) . . . the machine automatically slows down when out of bottles and automatically increases its speed as bottles again flow to it. It paces itself to line load requirements.	Do you ever anticipate handling half gallon containers or polyethylene bottles. You can . . . on a Super C.M.	The clean-up operation on a Super C.M. Labeler is simplicity itself (with no heavy gluing mechanism to remove and clean).	You can buy the electrical parts for the WORLD Super C.M. Labeler in any radio or television store if you ever need them.
FLEXIBILITY		PRIVATE LABEL	
The dynamics of change will apply in the future as they have in the past and quite likely at an accelerated pace. Can anyone then state irrevocably that a package will not change only because it hasn't changed in the past twenty years? The Super C.M. offers you a guarantee against being unable to handle a new package regardless of shape.		You can run as many as three or more different labels on the same package at the same time without any loss of operating speed or efficiency. Should you be a private brand packer you can run as many as four different customer labels on one size container simultaneously. No other machine has ever offered this advantage!	

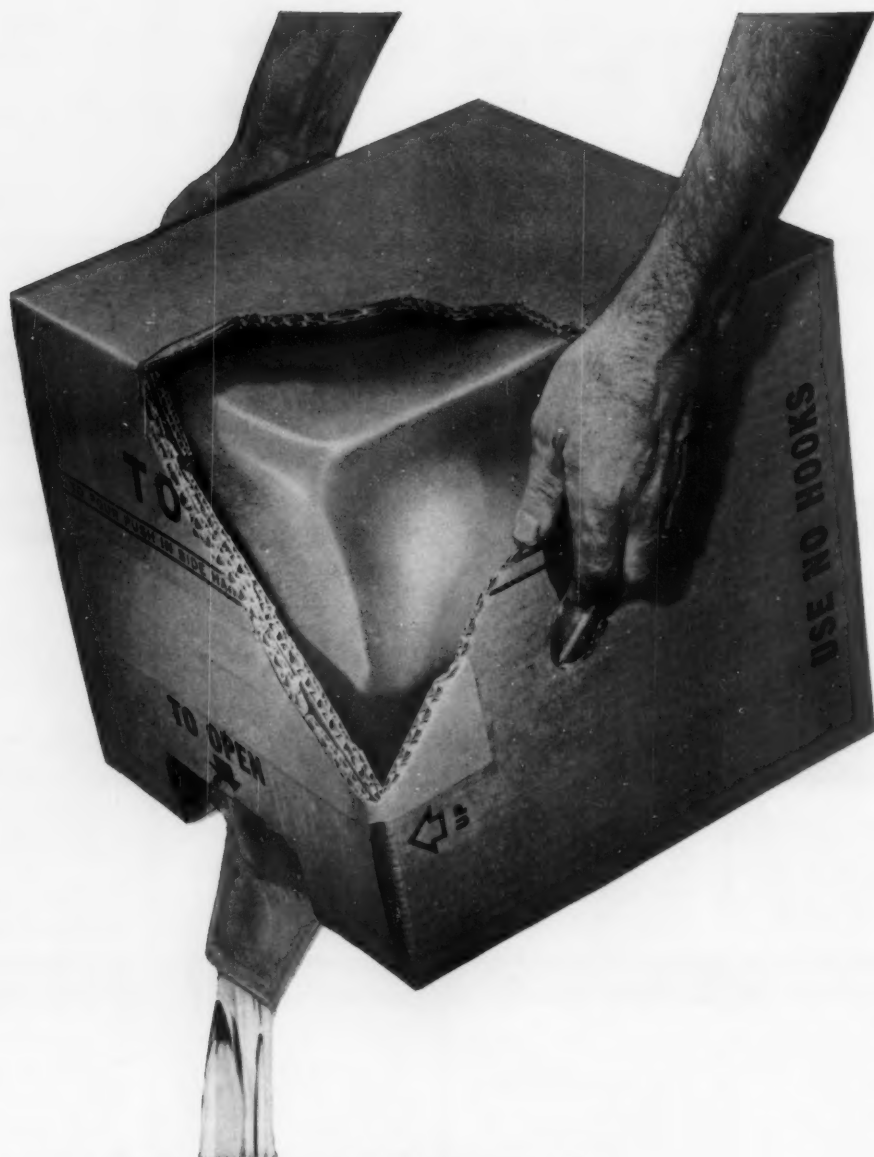
Good  
Labeling  
Sells!



## WORLD LABELERS

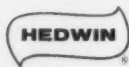
ECONOMIC MACHINERY COMPANY • WORCESTER 3, MASS. / Division of Geo. J. Meyer Manufacturing Company





# CUBITAINER®

...the polyethylene cube with a corrugated or wirebound box outerwrap, is widely used by industry and government for bulk liquid shipment. It combines chemical resistance with non-breakability, rigidity of the box overwrap, with considerably reduced costs. The CUBITAINER costs less than other bulk shippers, requires up to 50% less storage and shipping space, has a tare 1/6th that of glass. Pour spout models, heat-sealed after fill, require low-cost specialized filling equipment. Screw-cap models are adaptable to standard equipment. Products now shipped in CUBITAINERS range from acids to fountain syrups, adhesives to pharmaceuticals. Meets industry, government standards, can be used for regulatory products. Investigate this container today! Write:



## **HEDWIN**

CORPORATION  
BALTIMORE 11, MARYLAND





**"Low cost BLISTER PACKS give us an edge in sales"** says W. George Gress, Director of Purchasing, Gillette Safety Razor Co., Boston, Mass.

"With Celanese Acetate sheeting," says Mr. W. George Gress, "we get an economical packaging material and an economical way of using it. As for package quality—it's excellent! That includes a beautiful view of the product and plenty of protection."

It's so easy to mass-produce an attractive package like the Gillette hanger card. With Celanese Acetate sheeting formed into blister packs, you can make your packaging part of the assembly line. Some packaging operations are running at rates of 1000 blister packs per minute or more!

Acetate sheeting gives you a sparkling-clear, semi-rigid enclosure that resists aging, keeps your product factory fresh, and protects it from damage. It's a natural sales booster . . . a temptation to the impulse buyer.

Find out how thermoformed Celanese Acetate sheeting can help you add sell to your product at a cost you can't afford to overlook. Write to: Celanese Plastics Company, a Division of Celanese Corporation of America, Dept. 108-C, 744 Broad St., Newark 2, N.J.

Celanese®  
Canadian Affiliate: Canadian Chemical Company Limited, Montreal, Toronto, Vancouver.  
Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Ave., New York 16.

acetate . . . a **Celanese** packaging plastic



# hi-fax<sup>®</sup> provides packaging with a luxury look



Now new Pink Lotion Lux Liquid has a container as modern as the liquid detergent it contains.

Changing a packaging design is a major operation at Lever House and this latest innovation—the conversion to a plastic bottle—was made only after marketing and packaging experts had tested dozens of containers and then subjected them to extensive consumer reaction as well. The outcome was the “Doric” model based on Hercules Hi-fax high-density polyethylene.

Why Hi-fax?—Consumer and dealer reactions to the new container included these advantages: no denting or breaking, no rusting, better gripping, no leaking, no danger of chipping porcelain or tile.

Hi-fax offers many other advantages aside from those of direct interest to the consumer. It is economically competitive with metal, lightweight, offers molded-in color possibilities and can be molded to almost any shape.

If you design, package or sell, you'll want to know more about the properties and advantages of Hi-fax. Write to Hercules for further technical data.

Lux Liquid containers molded by Continental Can Co., Inc., The IMCO Mfg. Corp., Owens-Illinois Glass Co. and Plax Corporation.

**HERCULES POWDER COMPANY**

900 Market Street, Wilmington 99, Delaware





# How MILPRINT gets THE NEW ROLL

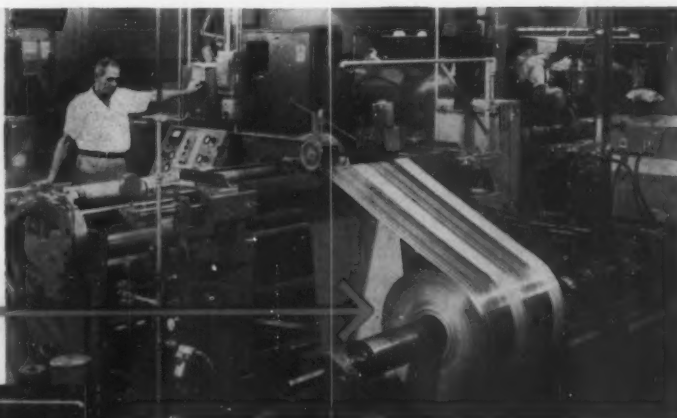
...the highly perfected finished roll produced on an integrated unwinding-slitting-rewinding system engineered by Cameron specialists.



On this integrated Milprint installation *The New Roll* is running 24 hours a day in straight slitting-rewinding and in rewinding-inspection operations. The material, lightweight printed laminated foil, demands:

## **Integrated Control**

**...from parent roll**



## **to perfect finished rolls**

On this integrated system the parent roll feeds from a Cameron Unwind Stand equipped with several control features including a Cameron Model KW Continuous Duty Brake. Control signals flash through the sensitive Cameron Model 900 Constant Tension with electronic side-register guiding to a printed line. With differential surface-and-center rewind, perfect control is maintained right through to finished rolls on the Cameron 620 slitter-rewinder, using Cameron Pneucut pneumatic score-cut slitting.

The sound, modern engineering and economic principles of *integrated* roll control are being closely studied in converting plants, paper and paperboard mills, and finishing rooms everywhere.

Whether you work with papers, plastic films, metal foils, laminates or any other flexible web material, the growing competitive importance of *integrated* roll control deserves your

immediate attention. A finished roll produced on a completely integrated unwinding-slitting-rewinding system is not just a better roll—it is a fundamentally different roll!

We call it *The New Roll*. Its vital new qualities of inward excellence meet and exceed the new standards required in modern high speed, long-run printing, converting and finishing operations.

## **Get The New Roll Now!**

The Cameron team of specialists maintains extensive testing, development and information services adapting *The New Roll* to flexible web materials of all types. You are invited to make use of these facilities at any time. See what *integrated* roll control can do for you. Write, wire or telephone to:

# **CAMERON**

**a team of specialists**

**Cameron Machine Company, Franklin Road, Dover, N. J.**

**Canada:** Cameron Machine Co. of Canada, Ltd., 15 Hatt St., Dundas, Ontario

**France:** Batignolles-Chatillon, 5 Rue De Montessuy, Paris (7e) France

The famous TIDLAND pneumatic shafts are sold exclusively through Cameron

54 years devoted exclusively to the design and manufacture of slitting, roll winding, unwind and web control equipment.



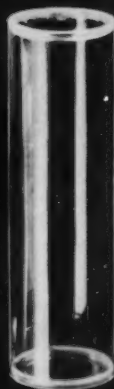
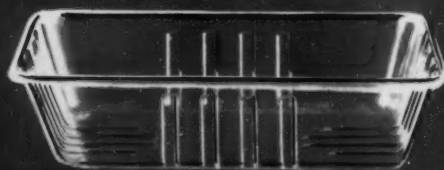
at last—  
transparent

**PACKAGING** for frozen,  
refrigerated and fresh foods

■ sturdy ■ greaseproof ■ non-toxic

FDA approved

Available in transparent or colored opaque —  
printed tops, 8-10-12 and 16 ounce sizes,  
round or rectangular.



**BRAND NEW — AND AVAILABLE FROM**

the  
*Crystal* line—  
when only the finest container will do—

sift-proof, transparent  
packaging for  
powdered and  
granulated products,  
pills and capsules

J-E PLASTICS MANUFACTURING CORP.  
1780 BROADWAY, NEW YORK 19, N.Y.

*please send me the following:*

- ☐ Catalog of J-E Design-Engineered Packages
- ☐ More information about J-E Frozen Food Packaging
- ☐ More information about the Crystal line

NAME \_\_\_\_\_

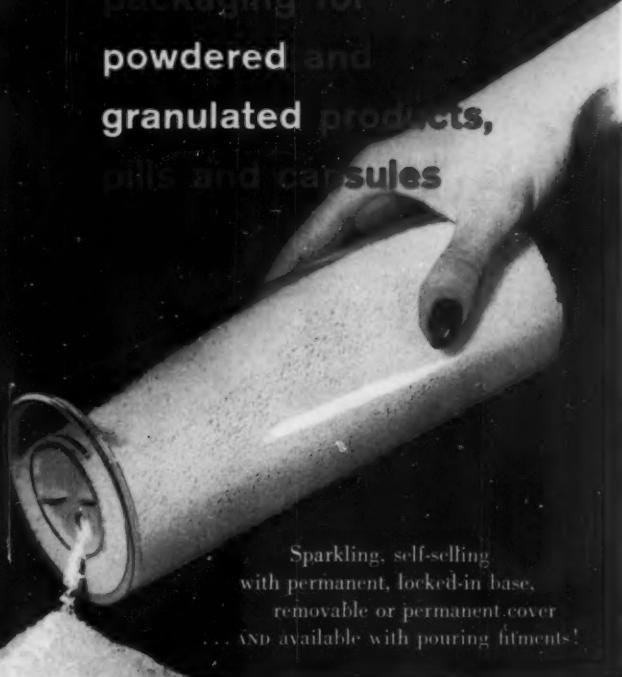
TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

OUR PRODUCT IS \_\_\_\_\_

DEPT. MP \_\_\_\_\_



Sparkling, self-selling  
with permanent, locked-in base,  
removable or permanent cover  
... and available with pouring fitments!

*for ahead-of-the-minute, design-engineered packaging, look to —*

J-E PLASTICS MANUFACTURING CORP., 1780 BROADWAY, NEW YORK 19, N.Y., and 400 NEPPERHAN AVE., YONKERS, N.Y.



# Licks Sticking Problems



## **New Release for Products, New Relief for Customers . . . Syl-off Paper Coatings!**

Do you often feel you must provide the impossible to meet your customers' needs for special release papers, paperboard, package liners or interleaving? Now you can provide the impossible — any degree of anti-adhesiveness — with Syl-off® coatings, silicone products developed by Dow Corning especially for coating paper and paperboard. Syl-off coatings are easily applied to either one or both sides of all types of packaging materials . . . kraft, glassine, parchment, multiwall bag liners, boxboard, plastic film and interleaving sheets, to name a few. This versatility may quickly suggest other areas of application to you . . . perhaps one that provides the perfect solution to your customers' problems.

Introduced only recently, Syl-off coatings for paper and paperboard have already received wide acceptance. Understandably so when you consider their exclusive properties. Syl-off coatings offer the "let-go" that prevents even the most gooeey product from sticking . . . asphalt, glue, resin base, rubber compound, adhesive . . . you name it. Applied to backing papers for pressure sensitive materials, Syl-off coatings provide free peeling . . . do not alter the adhesiveness in use.



Extensive tests have proved Syl-off coatings won't contaminate, transfer, or migrate. In addition, papers coated with Syl-off have a natural nonoily lubricity — also have the high degree of water repellency characteristic of silicones. And there's price appeal in Syl-off coatings . . . often they cost less than ordinary release coatings; they last as long as the paper itself; and their light weight frequently means lower shipping costs.



When you consider coatings for uniform, controlled release of sticky products, remember . . . you can always be sure of best results with Syl-off. Get full information about Syl-off coatings now.

Write Dept. 7303 for prompt reply.

\*TM Dow Corning Corporation.

Your nearest Dow Corning office is the number one source for information and technical service on silicones.



**Dow Corning CORPORATION**

MIDLAND, MICHIGAN

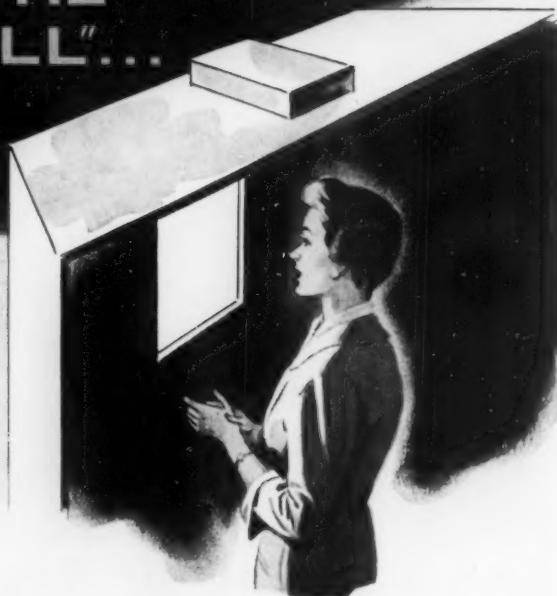
ATLANTA BOSTON CHICAGO CLEVELAND DALLAS LOS ANGELES NEW YORK WASHINGTON, D. C.





Supermarket Simulator  
located in Port of New York Authority  
Bus Terminal

How  
United States  
Testing Company  
helps  
**MEASURE  
THE  
"SELL"...**



## **...IN YOUR PACKAGE**

Our Supermarket Simulator with our selected consumer panels will tell how much "sell" is in your package...and also how to put more in it. Our measurements are meaningful because our tests are conducted under actual store conditions, with the package in competition with other brands and products.

We are equipped to measure many properties of packages, such as: legibility thresholds, apparent size, recall potential,

apparent qualities, brand recognition, and others. Consumer panels can be selected to meet any criterion. We work out all steps with the client and welcome his participation and observation.

Why not let us measure the "sell" in your package...and help you increase it? Write or phone for full details. No obligation.

***Send for your free copy***  
***"Analyses in Visual***  
***Communication".***



Psychometrics Division  
**United States Testing Co., Inc.**  
1415 Park Avenue, Hoboken, N. J.



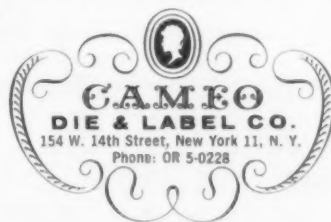
**Branch  
Laboratories**  
Boston • Brownsville  
Dallas • Denver  
Los Angeles • Memphis  
New York • Philadelphia  
Tulsa





## Knighited for Elegance...

The distinctive character of the new Cameo Hand Engraved process gives a quality look to your foil package or label that is unequalled. It reveals the attention to detail and fine craftsmanship you can expect from each Cameo job whether large or small. Foil printing and embossing on labels, seals, tags, box wraps, displays, foil. Cut-outs, paper-gummed PRES-SURE-STICK or heat seal. For details write:



In Canada Cameo Crafts Inc., 157 St. Paul Street, West Montreal 1, Que.



# "IT'S WHAT'S INSIDE THAT



WANT THE INSIDE STORY ON PEELAC?  
CLIP AND MAIL THIS COUPON TODAY!

Nashua Corporation  
Dept. M.P.  
44 Franklin Street  
Nashua, New Hampshire

Send full information on Peelac Peelable  
Tape and how it can boost profits for me.

NAME \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

## peelac\*

\* trade mark

peelable corrugator's

In Canada Nashua (Canada) Limited



**COUNTS"** -

**peelac**\*

# **INSURES PRODUCT PROFITS**

Peelac, Nashua Corporation's new peelable corrugator's tape just zips off!

- SEALS CARTON SECURELY — PEEL IT OFF TO OPEN
- NO KNIFE BLADES TO DAMAGE CONTENTS
- STOPS COSTLY PRODUCT RETURNS
- SIMPLIFIES IN-CARTON DISPLAY
- ENDS PRODUCT DAMAGE AND LOSS
- SAVES DEALER TIME AND TROUBLE

Peelac is the NEW LOOK in packaging — the greatest development since cellophane.

Activated by water, Peelac has all the characteristics of pressure-sensitive tape with one BIG advantage — you don't cut it, you PEEL IT OFF, quickly, safely, easily. And it costs just a fraction of what you would expect to pay for such an amazing tape. Your corrugated box maker has complete details.

**NASHUA**  
CORPORATION



Just peel

it off to open

tape

Peterborough, Ontario





## NIGHT AND DAY!

*Night and day* you can see the difference. Perfect ink adhesion, level rolls with faultless wind and tension, even gauge and correct yield make EXTRUDO-FILM's quality controlled polyethylene film the choice of leading converters.

*Night and day* your orders receive the full attention of this single product company. All EXTRUDO-FILM's efforts are devoted to giving you consistently

uniform, trouble free film. EXTRUDO-FILM is dependable. That's part of the difference.

*Night and day* EXTRUDO-FILM's technical representatives are available to show you how high speed printability and the elimination of weave and registration problems can mean more profit for you.

*Night and day* try EXTRUDO-FILM and know polyethylene at its best.

**EXTRUDO-FILM**  **CORPORATION**

**Plant No. 1 and Executive offices: 36-35 36 Street/Long Island City 6, N. Y.**  
**POTTSVILLE, PENNSYLVANIA • 100 WEST CHICAGO AVENUE/CHICAGO 10, ILLINOIS**



# Background for Packaging

**Watch polypropylene film**, now that production problems (a question of uniformity) are gradually being ironed out. Predictions are coming now not only from the large chemical companies who have invested many millions in production facilities for the resin, but from important converters. *Continental Can*, for one, has announced that it is currently producing polypropylene film on an experimental basis and says that the film "has many attributes that the company feels will make significant inroads on the cellophane market and also will have some effect on the sale of polyethylene, especially in the bakery field." Among the attributes: low cost, high clarity, good machinability.

**Tips from consumers** are studied by canners. At National Canner's annual meeting, *Mrs. Agnes R. Olmstead*, director of home economics for Colonial Stores, reported on a survey of 300 shoppers. Among the conclusions: There is interest in a larger, family-size can holding six servings of popular, basic foods (tomatoes, spaghetti); at the same time, many housewives seeking variety want soups, vegetables and meats in two-serving or even one-serving size. Labels with larger print, more-informative copy, more recipes and better instructions were suggested, and one housewife pleaded for square cans to save space in her cupboard.

**New bag construction** soon to be announced has a patented bottom feature which, with a pinhole-free liner material such as cellophane, should make it impossible for the wrapper or outside of the bag to come into contact with the contents; thus, complete greaseproofness for such uses as high-shortening-content bakery items. Note that this construction should also prevent any wicking of outside elements, possibly unacceptable to F&DA, into the product.

**Big breakthrough** for canned beer may come in growing acceptance of this package by taverns, which previously had insisted on the traditional export-style bottle. *The New York Times* recently devoted a full column to a survey on this subject, found tavern owners pleased with customer acceptance of cans because of reductions in handling costs. Bartenders' explanation for "can preference": new generation of younger beer drinkers has become accustomed to canned beer at home, on picnics, etc., and likes familiar package.

**Lost business** is the price packagers pay when food retailers are out of the specific size customers want, an *A. C. Nielsen* study shows. If the desired size is missing, 12% of the customers don't buy, 16% shop elsewhere and 17% buy another brand. If the brand is completely out of stock, 20% don't buy, 36% go elsewhere and 44% switch brands.

**Look for** more intensive training of salesmen by suppliers of packaging materials in answer to critics who say sales personnel are inadequately prepared to discuss their products and their customers' problems and to suggest practical, economical solutions. At least two major suppliers have elaborate sales-training programs in the blueprint stage.

**Polyethylene coatings** will find their greatest use shifting from paper to paperboard in the next three years, according [*Continued on page 44*]

Notes, quotes and

comments. An

editorial feature



DRESS

*Talon*  
ZIPPER

\*  
magic-zip

SKIRT

*Talon*  
ZIPPER

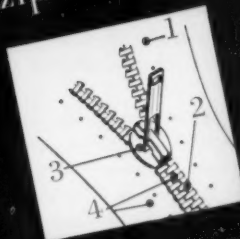
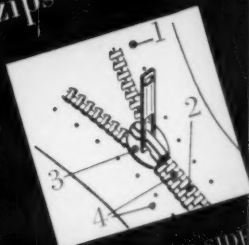
\*  
magic-zip

**New Zip  
for Talon ....**



\* zips like magic

\* zips like magic



SEE OTHER SIDE

SEE OTHER SIDE

\*  
magic-

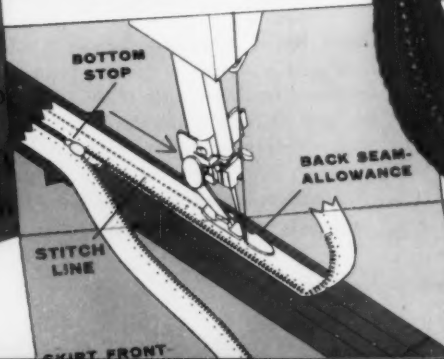


SEE OTHER SIDE

1. New Sewing Guide
2. Stronger Chain
3. Precision Slider
4. Permanent Closure

Style 20  
closed at both

## THE A-B-C METHOD



**FIRST PREPARE**  
Length of placket  
equal length of met  
plus waistline seam  
day-stitch (regul  
to prevent st  
m-allowanc  
allowances 6



..... with **BRITE-PAK**  
**ENAMEL COAT**

The swing to Brite-Pak Enamel Coat bleached board continues! Now Talon, Inc., is using these trim, Brite-Pak "sales envelopes" for their famous zippers.

Snow white on both sides and all the way through, these sparkling packages look far more attractive than old-fashioned containers with their drab interiors next to the product. See how Talon makes use of Brite-Pak's *inside* whiteness to print easy-to-read sewing instructions.

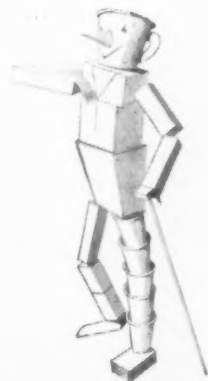
Enamel Coat's gleaming surface is unexcelled for brilliant product illustrations and full color process printing. Yet Brite-Pak is economical.

Users say Brite-Pak Enamel Coat is the best machine coated bleached board on the market. It's the perfect answer for colorful, *modern* packaging. See how you can use it to upgrade *your* packaging . . . and still save money.

For full details, write to Bleached Board Division, West Virginia Pulp and Paper Company, 230 Park Avenue, New York 17, N. Y.



**West Virginia**  
**Pulp and Paper**





to projections by *H. A. Arbit* of Union Carbide Plastics. While paper coatings, now taking 20 million pounds of resin yearly, will more than double by 1963, paperboard coating will jump from present 3 million to close to 50 million pounds, according to these estimates. *Reason:* The growing demand for inert, sealable, protective coatings on food-grade and other folding boxboard.

**Phenomenon** that new package forms seem to create new markets, rather than cutting into established competitors, is once again demonstrated in the case of collapsible metal tubes. Dispensing convenience of the metal tube in recent years has been challenged by the squeeze bottle, the squeeze tube and the aerosol—with no great loss of tube output. What seemed likely to be a major blow came two years ago when paste-dispensing aerosols moved into the toothpaste field—which has always used more than half of all metal tubes produced. But what happened? In 1958 the production of collapsible metal tubes passed a billion units for the first time. And in 1959 tubes racked up a further 13% gain—to a total of 1,138,000,000.

**Can-industry claims** of big recent growth in canned soft drinks are supported by *Canada Dry*, which says its domestic sales of canned beverages doubled in 1959 over previous year. The company now has canning facilities in seven plants, nationwide. *But note:* Glass industry counters with new emerald green ultra-violet-absorbing bottle; one big soft drink is adopting it and two others are expected to follow.

**No need to worry** about production capacity for blown high-density polyethylene bottles, if molders' expansion predictions are borne out. In addition to big plant expansions by major established molders, new producers are coming in at an amazing rate. In 1957 there were exactly seven blow-molding companies. Today there are 80—and one source close to the industry predicts 180 by 1961 and 1,000 by 1965. Only question for detergents and other products heading for big-volume use of blown bottles may soon be the supply of resin, rather than molding facilities.

**Targets are set** for aluminum in the can field. According to *Kaiser Aluminum & Chemical*, the aluminum industry expects to have 15% of the oil-can market (which would mean about 1.2 billion cans) by the end of this year and about 10% of the total can market, requiring 200,000 tons of aluminum, by 1963. In the next three years, Kaiser expects greater penetration of shallow-drawn aluminum cans into frozen citrus concentrates, fish, potted meats and industrial products, and in the period 1964-67 it foresees general use of 12-oz. drawn-aluminum cans throughout the beer industry.

**Use of polyethylene film** is five times as great as five years ago, but production capacity has grown even faster and the present 25% over-capacity is a stimulant to marketing as well as a restraint on prices. *J. L. Rodgers*, sales director of Union Carbide Plastics, told the National Flexible Packaging Assn. biggest growth area is in bakery field, which he estimated might take 60 million pounds of polyethylene film by 1963, as against 3 million in 1958. *Big item:* bread wrap.

**Vending-machine operators**, having solved most of their machine and change-making problems, now look for new types of packaging, especially for prepared food items. *Arthur D. Stevens* of the Vendo Co. reports experimental work in designing colorful plastic packages, both rigid and flexible, as well as colored metals, to fit vending machines. The industry still hopes for irradiated foods—to simplify preservation problem in vending machines—despite recent discouraging results of Quartermaster Food & Container research.

Background

for

Packaging

[Continued from page 41]



## NEW DESIGN AIR CLEANERS SPEED OUTPUT AT KRAFT

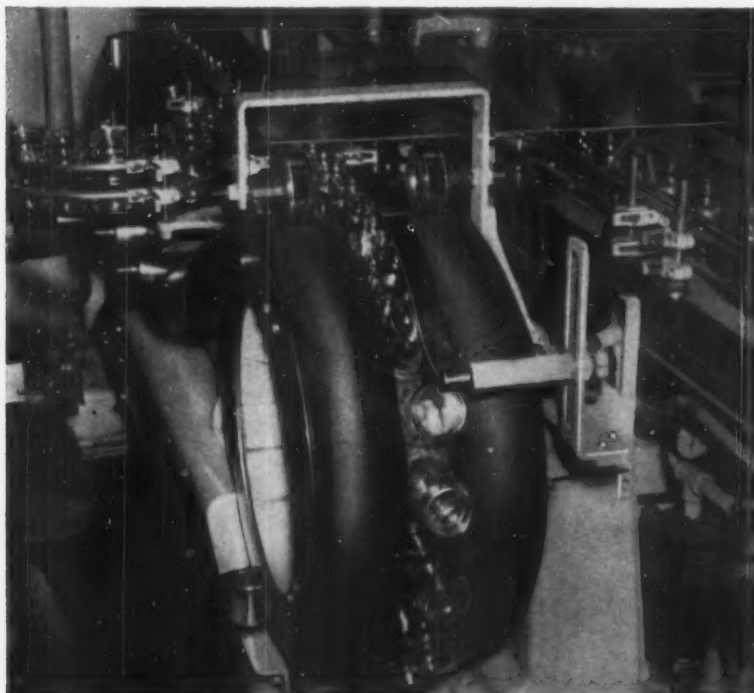
Kraft Food's Miracle Whip and Miracle French Dressing are as well known and as widely used by American housewives as their favorite brand of cosmetics. In the business world Kraft, a division of National Dairy Products Corp., enjoys a reputation as one of the nation's most able producers and merchandisers of food products.

Part, at least, of the KRAFT success is in its willingness to venture into the realm of new departures from old production principles. Pneumatic's revolutionary PNEUMACLEAN Air Cleaner is an example. Employing a never before used method of container handling—continuous air inflated Neoprene tubes—it cushions the jars or bottles gently while

it inverts them, holds them firmly and moves them with record speed through the process of jet air cleaning. KRAFT quickly saw the advantages, installed the equipment and is now reaping the benefits in terms of much faster delivery of cleaned containers—270 or more per minute.

KRAFT, a long time advocate of Pneumatic "lower cost per container" operation also uses Pneumatic equipment for filling, capping and, to considerable extent, labeling these containers.

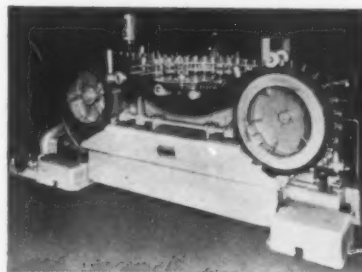
When you're looking for the latest method of doing an automatic, or semi-automatic, packaging or bottling job look the way the leading producers in all fields do—to Pneumatic.



KRAFT runs both its wide mouth salad dressing jars as well as its narrow neck containers for a variety of sauces and dressings through its Pneumaclean units with equal facility.

- "Sausage" type Neoprene tubes do trick

- Kraft among first to convert



PNEUMATIC SCALE CORP., LTD.,  
82 Newport Avenue, Quincy 71, Mass.  
Sales Offices: New York; Chicago;  
Dallas; Rochester. Agents: Fred Todt  
Company at Los Angeles, San Francisco  
and Seattle; Rockwell Pneumatic  
Scale Ltd., Edgware Road, London,  
N.W. 2, England; O.R.M.A., Paris 8,  
France. Subsidiaries: Delamere &  
Williams Co., Ltd., Toronto; Carbert  
Mfg. Co., Inc., Cambridge, Mass.





## 4 reasons why Mylar® is the ideal window material...

1. Dimensional stability unchanged by long storage



2. Tear-resistant even at sub-freezing temperatures



3. Sparkling clarity makes each box a selling showcase



4. Durable enough to make corner windows practical



## Now your product can get lasting protection, more sales appeal with carton windows of "Mylar"

Now Du Pont "Mylar"® polyester film makes it possible to package products in window boxes that could previously be packaged safely only in opaque cartons. And with "Mylar" you can have two and three face windows where only one could be used before.

Why is "Mylar" the ideal window material? "Mylar" is the strongest of all plastic films. This means you eliminate costly breakage caused by shopper handling. You get better displays . . . and long, long shelf life—even for slower-moving products. Result: more profit for you.

**PLANNING A NEW PACKAGE?** Talk to your box maker about planning a more profitable carton package with a window of "Mylar". For a sample of "Mylar" and more information, write: E. I. du Pont de Nemours & Co. (Inc.), Film Dept., Wilmington 98, Delaware.

"Mylar" is Du Pont's registered trademark for its brand of polyester film.





FROM *Hawaii* TO **ALASKA**

AND IN EVERY STATE

YOUR PRODUCTS NEED

FOXON FOIL LABELS

*at the point of sell*

REMEMBER, YOUR BEST SALES-AIDS  
AT THE RETAIL LEVEL ARE . . . . .

**Foxon & Foil**

Creative designing techniques — skilled production, using foil, metal, plastic, paper — die-cutting, embossing, coating, leaf stamping — pressure-sensitive (permanent or removable type) — heat-seal (delayed or instant action) — and, of course, regular gummed and ungummed.

**The Foxon Company**

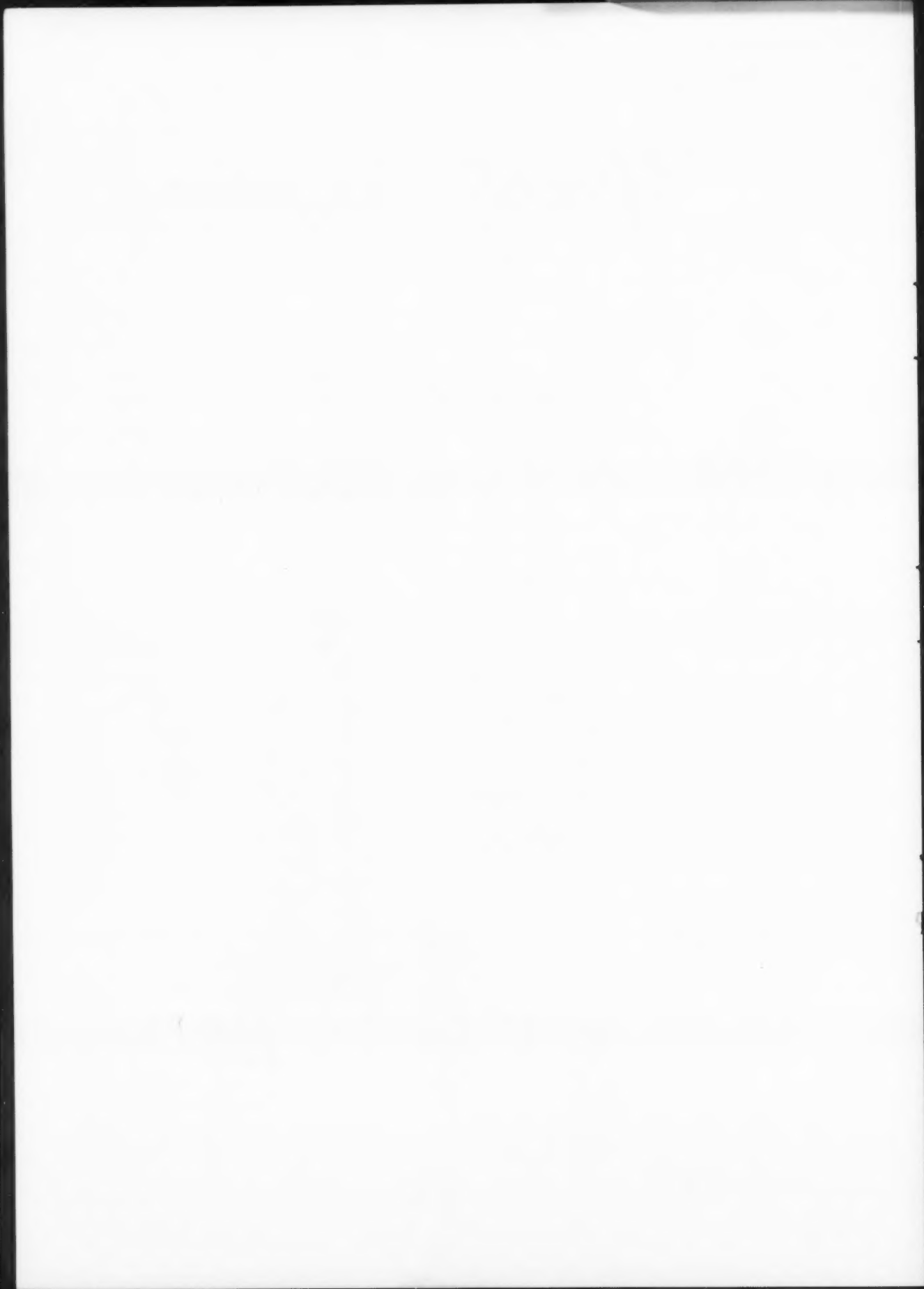
PROVIDENCE 1, RHODE ISLAND

OUR AFFILIATE

PAUL ASSOCIATES, INC., PALM SPRINGS, CALIF.







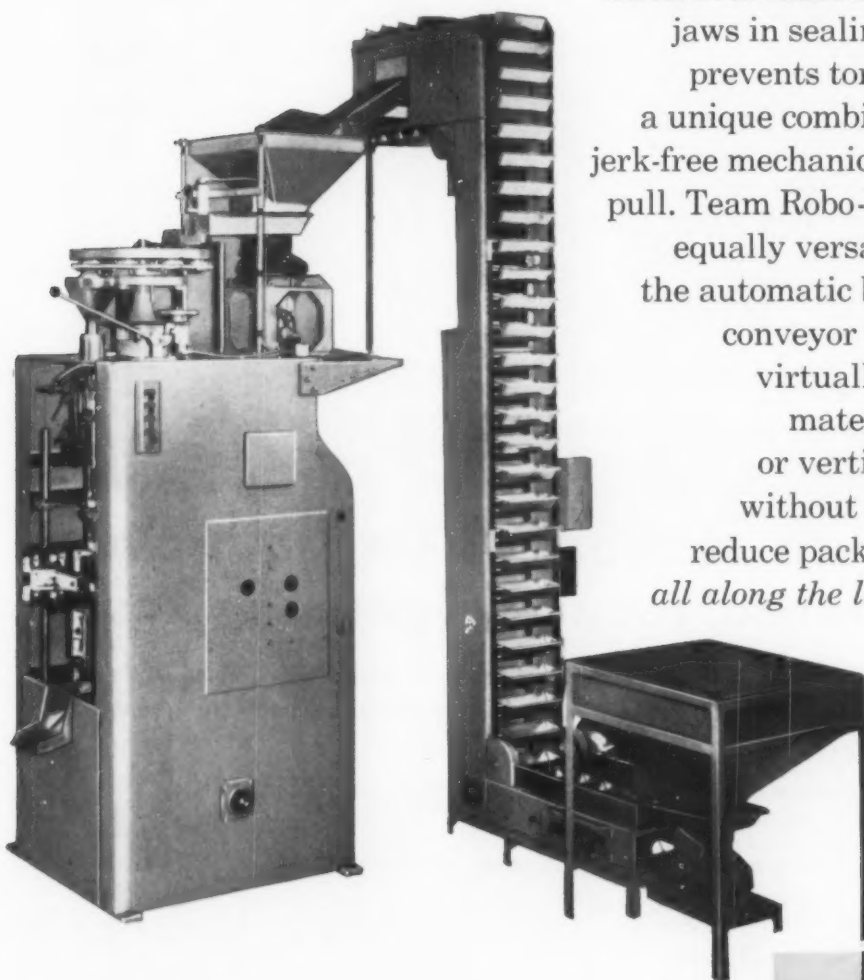


# ROBO- WRAP

Liquids, powders, solids, granules: Robo-Wrap versatility forms, seals and fills up to 120 poly, cello, paper, plastic or laminate pillow packs per minute, with a reject rate that's negligible.

New standards of sealing . . . an amazingly low down time record is being set by Robo-Wrap in the most demanding and highly automated installations throughout the country: the result of still another Lynch engineering advance—the unique

hand-over-hand action which holds jaws in sealing position longer, prevents torn roll stock with a unique combination of strong, jerk-free mechanical and hydraulic pull. Team Robo-Wrap with the equally versatile Robo-Lift—the automatic bucket elevating conveyor which moves virtually any free-flowing material horizontally or vertically, gently and without re-handling—to reduce packaging costs *all along the line.*



*Write now for arrangements to see a Robo-Wrap, Robo-Lift installation in action near you.*

## LEADERS LOOK TO LYNCH— FOR MACHINES THAT PACKAGE ALMOST ANYTHING!

*Manufacturing Engineers of automatic processing equipment  
in the glass, packaging, plastic and other industries*

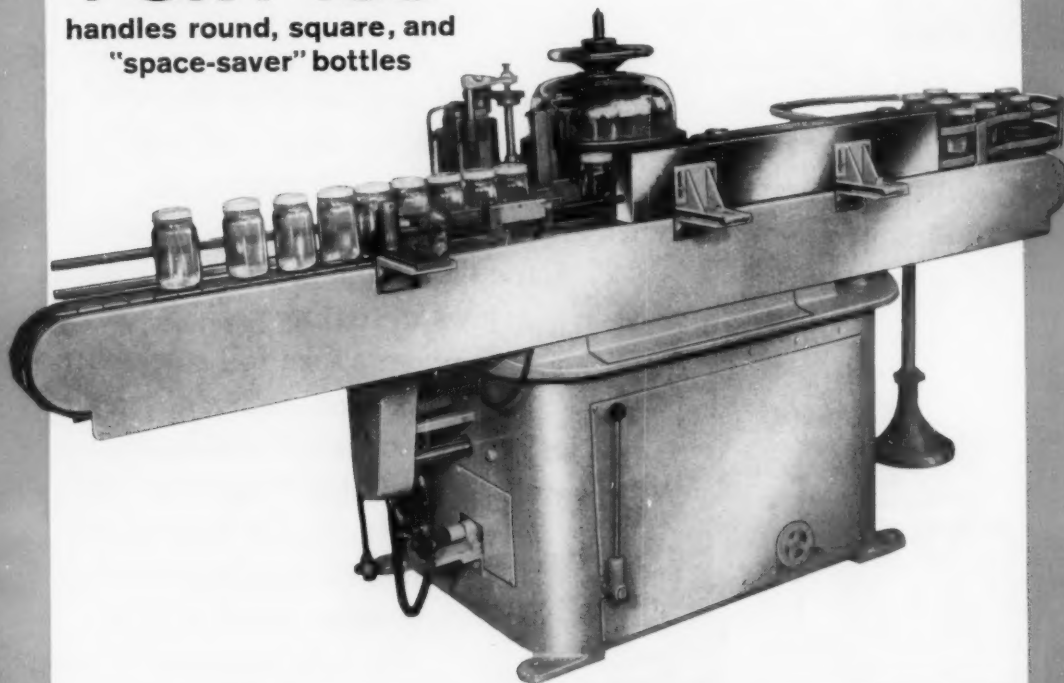
ATLANTA • CHICAGO • SAN FRANCISCO  
ENGLEWOOD, NEW JERSEY • DEFIANCE, OHIO

**LYNCH**  
CORPORATION  
Anderson, Indiana



## PONY 165

handles round, square, and  
"space-saver" bottles



## 165-per-minute suction labeler improves bottle appearance, reduces operating costs

The space-saving Pony 165 combines low operating cost with high quality labeling. Its basic 165-per-minute speed can be stepped up, with modifications, to as high as 240.

The Pony 165 uses suction for accurate label placement. Micro-glue control prevents seepage. Shockless straight-line handling ends glass breakage. Rolling pressure action provides a tight, edge-to-edge bond. And the non-stop, rotary single-head machine needs only a minimum of maintenance.

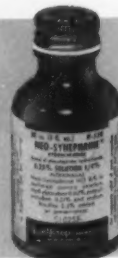
The Pony 165 handles round, square and "space-saver" bottles; spot, wrap-around and three-panel labels. It accommodates vials to gallons, label sizes

from 1 1/8" wide x 1/2" high to 5 1/2" wide x 5" high.

Only 20 minutes for label changes, five minutes for bottles. Ask for new Pony 165 Bulletin.

### PONY 165 PROVIDES QUICK, CLEAN LABELING OF PHARMACEUTICAL PREPARATION

Quality labeling of drug products is important. That's one reason why Winthrop Laboratories, Myerstown, Pa., uses the Pony 165 to label their Neo-Syneprine Bottles.



## NEW JERSEY MACHINE CORPORATION

AUTOMATIC LABELING • CARTONING AND PAPER BOX MACHINERY

FACTORY SALES AND SERVICE BRANCHES

325 W. HURON ST., CHICAGO 10, ILL.  
1701 CAREW TOWER, CINCINNATI 2, OHIO  
2500 W. 6th ST., LOS ANGELES 57, CALIF.

MAIN OFFICE & PLANT • 16th ST. & WILLOW AVENUE, HOBOKEN, N. J.

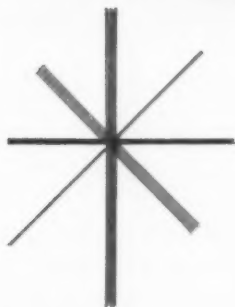


# Find out about SENSI-STICK...

## World's fastest hand labeling

### Labels by Steigerwald

*Fine labels of all kinds  
at reasonable cost*



No glue, no water, no lost time with Sensi-Stick, our special pressure-sensitive labels. Permanent or removable, individual or in rolls.

Send us your labels for redesign, without charge or obligation; or ask for our estimate on printing your present labels. Telephone, wire or write to any representative below or to A. M. Steigerwald Co., 910 West Van Buren, Chicago 7. Tel. TAYlor 9-5400.

**CINCINNATI 27, O.**  
Stallmaier & Son, Inc.  
Mariemont Center Bldg.  
Bramble 1-0222

**DETROIT 3, MICH.**  
Harry W. Hogg  
20157 Greeley Ave.  
Diamond 1-3848

**LOUISVILLE, KY.**  
Practical Products Co.  
319 Jefferson St.  
Juniper 7-1257

**CLEVELAND 21, O.**  
A. C. Foster  
4040 Mayfield Rd.  
Evergreen 2-7555

**KANSAS CITY 5, MO.**  
A. B. Mason  
905 Jefferson St.  
Victor 2-6580

**MILWAUKEE, WIS.**  
H. C. Lackowski  
Route 1, Box 62  
Garden 5-5850

**MINNEAPOLIS, MINN.**  
J. E. & J. L. Moor  
3329 Dupont Ave., So.  
Tayler 4-5309

**ROCKFORD, ILL.**  
Blackhawk Paper & Cordage  
630 Cedar St.  
Woodland 8-9888

**NEW YORK 25, N. Y.**  
John H. McLaren  
500 West 111th St.  
Monument 2-0237

**ST. LOUIS 5, MO.**  
Marvin Yates Co.  
111 So. Bemisten Ave.  
Parkview 6-0296

GOLD OR SILVER EMBOSSED • DIE-CUT OR SQUARE • FOIL SEALS AND TAGS • FLAT OR CONTINUOUS ROLLS  
FOR HAND OR AUTOMATIC USE • HEAT SEAL • PRESSURE SENSITIVE • SPECIAL ADHESIVES

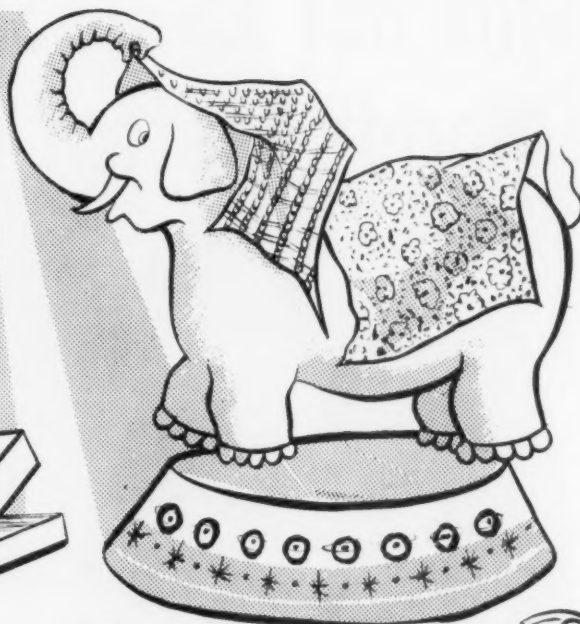
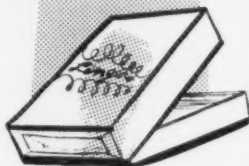


# Pickwick Papers Cover everything

YES, EVEN ELEPHANTS IF THEY'RE  
TOYS AND PACKED IN A BOX OR CARTON.  
IN PICKWICK'S FINE LINE OF PAPERS  
YOU'RE SURE TO FIND THE PERFECT PAPER  
TO SUIT YOUR NEED.

## PAPERS FOR

BOX COVERINGS • BOX WRAPS  
PACKAGINGS • PAPER TUBES  
DISPLAYS • SHOW CARDS • TAGS  
MERCHANDISING • PRINTING • GREETING CARDS  
LABELS • CASES • LUGGAGE • NOVELTIES  
DIRECT MAIL PIECES • ADVERTISING • ALBUMS  
BOOK COVERS • FOLDERS • POINT OF PURCHASE ITEMS  
AND 1001 OTHER USES



## STANDARD GRADES

- FOR DELIVERY
- FROM STOCK

## CUSTOM MADE

- FOR YOUR PARTICULAR
- REQUIREMENTS

PLAIN & FANCY PAPER—COATED & UNCOATED—DECORATED PRINTED—VINYL & POLYETHYLENE TREATED  
FUNCTIONAL & SPECIALTY PAPERS

## CALL ON US FOR YOUR CUSTOM PAPER NEEDS

OR CHOOSE FROM THESE FAMOUS LINES OF "STOCK PAPERS"

- 7 POINT LINE
- TOP GLAZE
- LUSTER WRAP
- GLEEMKOTE

- GALA PRINTS
- GALA GLAZED
- THRIFTY FLINTS
- MIDAS METALS

- COLORAMA
- AND A MULTITUDE  
OF LEATHERETTE-FOIL-GLAZED  
FLINT-CAST COATED AND  
OTHER FINE STANDARD GRADES

LET US KNOW YOUR PAPER NEEDS • WE'LL SEND AN APPROPRIATE

**Pickwick Papers, Inc.**

33-39 BETHUNE STREET :: NEW YORK 14, N. Y.

PHONE WATKINS 4-3824

SAMPLE

BOOK

FREE







## BRIGHTER OUTLOOK FOR BULK PACKAGING

### ...MARLEX\* Tailored Resin-101 for tougher, lighter, more economical bags

Chippewa and other leading manufacturers of heavy-duty bags are now making blown-tubing linear polyethylene bags from new MARLEX TR-101 resin. Stronger, tougher, more moisture resistant, and less expensive than low-density polyethylene bags for the same use . . . these new TR-101 bags offer attractive, more efficient, and less costly plastic packaging for bulk materials.

Laboratory and field tests prove that thinner-walled TR-101 bags outperform thicker-walled regular polyethylene bags. For example, TR-101 bags have up to 40% more tensile strength and more than 2½ times the impact strength. And, because TR-101 bags have thinner walls, they cost less to buy, less to use, less to ship.

For bulk material packagers currently using Kraft paper or low-density polyethylene bags, metal or fiber

drums, and similar materials . . . new heavy-duty bags made with MARLEX TR-101 mean less freight costs . . . excellent protection against product loss from handling or moisture spoilage . . . attractive packaging with colored or translucent film . . . and reduced packaging costs.

More and more packaging suppliers are finding the inherent physical properties of MARLEX TR-101 film for bags—strength . . . ability to withstand the severest climatic conditions . . . resistance to corrosion, rot and bacteria—also make it ideal for such non-bag applications as industrial tarps, agricultural films for mulches and other farm uses, covers for large machinery, and vapor barriers for construction.

For full details on MARLEX Tailored Resin-101 contact the nearest office listed below.

\*MARLEX is a trademark for Phillips family of olefin polymers

**PHILLIPS CHEMICAL COMPANY, Bartlesville, Oklahoma, a subsidiary of Phillips Petroleum Company**

#### PLASTICS DIVISION OFFICES

##### NEW ENGLAND

322 Waterman Avenue  
East Providence 14, R. I.  
Geneva 4-7600

##### NEW YORK

80 Broadway, Suite 4300  
New York 5, N. Y.  
Digby 4-3480

##### AKRON

318 Water Street  
Akron 8, Ohio  
Franklin 6-4126

##### CHICAGO

111 S. York Street  
Elmhurst, Ill.  
TERRACE 4-6600

##### WESTERN

317 N. Lake Ave.  
Pasadena, Calif.  
MURRAY 1-6997

##### SOUTHERN

6010 Sherry Lane  
Dallas 25, Texas  
EMERSON 8-1358

EXPORT: PHILLIPS PETROLEUM INTERNATIONAL CORPORATION • P. O. Box 7239, Panama City, Panama • Sumatrastrasse 27, Zurich 6, Switzerland





Package of  
Positive Protection  
For Modern Packagers

...the Fenwal  
**THERMOSWITCH<sup>®</sup>** Unit

Wherever films, foils, or paper are sealed on modern packaging machines, Fenwal THERMOSWITCH Units can assure faster, safer, surer control of heat. Easily adjustable to the widely varying temperature requirements of modern packaging materials, *their high speed and precision are a match for the most sensitive transparent film!*

The outer shell of the THERMOSWITCH Unit is the heat sensitive element . . . strut-and-shell assembly responds almost instantly to temperature changes of only a fraction of a degree. Contacts are totally enclosed and protected. Unit is precise and trouble-free . . . *even under severe conditions of shock, vibration, and corrosion.*

With ratings up to 10A-115VAC and ranges from -65 to +1500°F the THERMOSWITCH Unit is available as a miniature, surface-mounted, or immersion type, with hundreds of possible modifications. It is only *one* of the many Fenwal Temperature Control Instruments with which modern packagers are sealing and saving. Investigate. Write to Fenwal Incorporated, 65 Pleasant Street, Ashland, Massachusetts.



Series 17000  
THERMOSWITCH Unit

Another  
example of how



CONTROLS TEMPERATURE . . . PRECISELY





**Glass protects**



**Color attracts**



## Sprayed-on colors bring the rainbow to glass

Attractive, new decorative effects are possible now that permanent colors can be sprayed onto Duraglas® bottles. Your product will be seen in its best light if it's in a Duraglas container with the new coloring.

The sprayed-on colors won't come off. They can be applied to any container of your choice . . . either stock

bottle or private design. And ACL labels or designs may be combined with the over-all coloring.

In a Duraglas package, you can be sure, too, that your product will be protected. For glass never affects the scent or substance of what it contains . . . protects always.

The finest container, closure, and

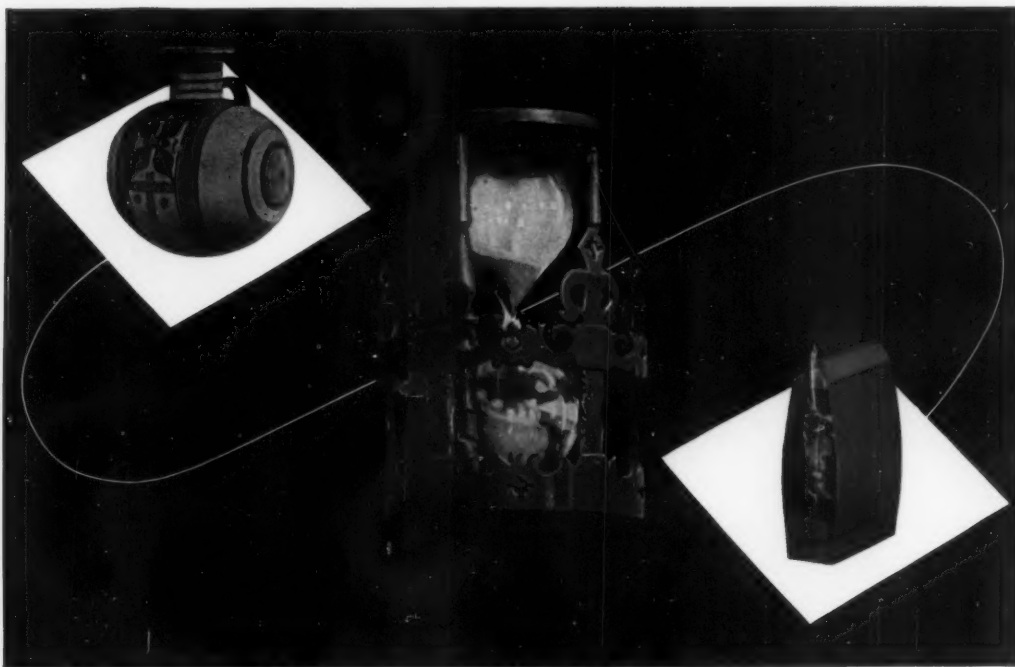
label—the finest sales package—can be yours through the Owens-Illinois Complete Packaging Approach—technical service, product and market research and production facilities.

Call the Owens-Illinois office nearest you, or write to Owens-Illinois, Toledo 1, Ohio, for complete information for your packaging needs.

**DURAGLAS CONTAINERS**  
AN **①** PRODUCT

**OWENS-ILLINOIS**  
GENERAL OFFICES • TOLEDO 1, OHIO  
PACIFIC COAST HEADQUARTERS • SAN FRANCISCO





## PAST, PRESENT AND FUTURE

in transparent film packaging . . . tremendous experience amassed over the years, and continuous research today, enabling us to lead the way in new development — these are the factors that guarantee you the most knowledgeable, most useful opinion on your own particular packaging problem. Do you want advice on the transparent packaging film that will suit your product best? We have scientists and technicians, the foremost in their field, to help you select the appropriate one. They may suggest cellulose film in one of its many

types. Perhaps you may need BCL polythene film. Or your product may be an 'awkward' one — something you thought could never be packaged visibly . . . like a liquid, a cream or paste, a powder; acid, alkali, grease, salt; a heavy, sharp article. In this case we should probably recommend polythene-coated cellulose film or one of our new plastic films.

Contact us now for further details and samples of our films. And if you need practical help to use them to best advantage, we are ready and keen to co-operate with you.



## BRITISH CELLOPHANE LIMITED

Henrietta House, 9 Henrietta Place, London, W.1, England

'Cellophane' is the registered trade mark of British Cellophane Limited in the following countries: U.K., Jersey and Guernsey, Commonwealth of Australia, Ceylon, Cyprus, Denmark, Eire, Federation of Malaya, Federation of Rhodesia and Nyasaland, Gibraltar, Hong Kong, Iceland, India, Jamaica, New Zealand, Pakistan, Singapore, Trinidad and Tobago, Union of South Africa.



# MOSSTYPE "D-MOUNT"®

the integral plate cylinder

with the

removable shaft

Booth 138  
Packaging Show  
April 4-7 • Atlantic City

No other plate cylinder can give you all the advantages you get with MOSSTYPE "D-MOUNTS". They cost far less than conventional integral cylinders of comparable accuracy . . . made of lightweight alloy, they are easier to handle, permit faster press speeds, take up  $\frac{2}{8}$  less storage space. And they are far more dependable than ordinary demountables—simple, foolproof shrink-fit assembly of "D-MOUNT" sleeve and interchangeable shaft assures the concentricity and rigidity you need for precision printing. Hundreds of plants throughout the world are now using MOSSTYPE "D-MOUNTS". How about you?

Write for literature



MOSSTYPE, "D-MOUNT"  
and MOUNTER-PROOFER  
are registered trademarks

## MOSSTYPE

2 plants at  
your service

WALDWICK, NEW JERSEY  
ELK GROVE, ILLINOIS

• MOLDED RUBBER PRINTING PLATES • CONTINUOUS DESIGN ROLLERS • RUBBER  
PLATE MOUNTER-PROOFER MACHINES • "D-MOUNT" RUBBER PLATE CYLINDERS

Pacific Coast: SOJANOWER MACHINERY SERVICE CO., Los Angeles • Canada: MANTON BROS., LTD., Toronto





For packaging that sells





from many shelves

MARATHON  
has the answer

Watch her! *Wherever* she stops—at the dairy, meat, produce, bakery or frozen food department—she picks up cartons and flexible packages made by Marathon.

Marathon, America's leading supplier of food packaging, has unequaled experience with the widest variety of printing processes; puts shopper-stopper appeal into every package design—whether on paper, paperboard, film or foil.

And *before* these colorful merchandisers reach supermarket shelves, Marathon men and machines make sure that packaging lines—both in-store and in-plant—operate at minimum cost. So remember: whatever the problem—whether package merchandising, materials or machinery—Marathon has the answer.

Marathon, A Division of American Can Company, Menasha, Wisconsin.

*For packaging...and ideas...*

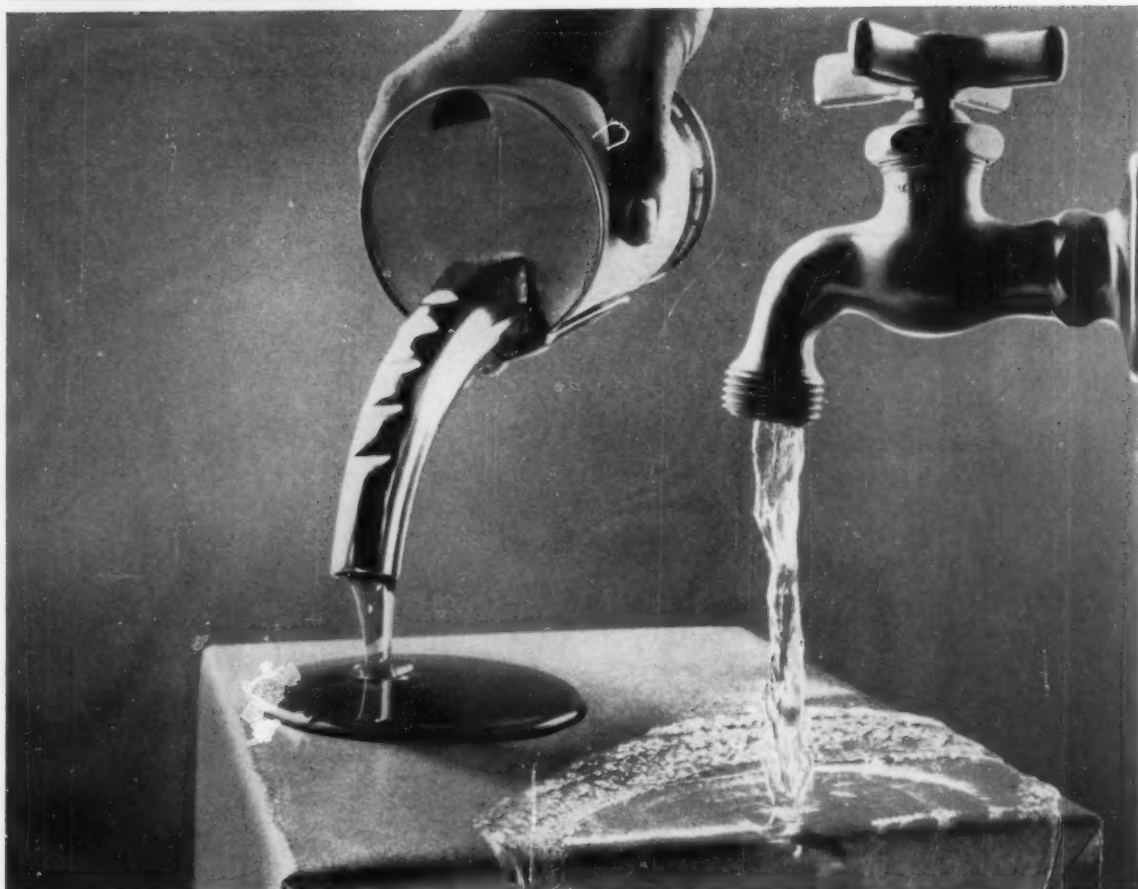
you can't beat **marathon** 







THE RAW MATERIALS OF PROGRESS



## Paper resists oil, water—It's treated with SCOTCHGARD®

GREASE & OIL REPELLENT PAPER SIZE

Make a test like this yourself: Pour oil and water on paper treated with SCOTCHGARD Brand Grease and Oil Repellent Paper Size. See the liquids refuse to "wet" and "wick"—see the resistance paper has to them. This is practicality you can put into a package.

Put an end to oil-stained cartons and wrappings. Keep your packages neat . . . from packing through shipment, storage and point-of-sale. Do this without sacrifice of color, strength, porosity, flexibility or any other important characteristic. SCOTCHGARD Paper Size, one of 3M Chemical Division's family of fluorochemicals, penetrates paper fibers. It is not laid on as a film or coating. Chicago Rawhide Manufacturing Company uses treated paper to wrap greasy and oily parts and gets a neat and clean package as a result. International Harvester solved a 70-year-old penetration problem in its binder twine wrapping. Label and carton are now always readable, free of oil stains.

Here's what SCOTCHGARD Grease and Oil Repellent Size can accomplish for you: Give unparalleled resistance to asphalt pene-

tration. Prevent unnecessary wax penetration on waxed papers. Permit use of thinner-than-normal polycoating. Permit packaging of greasy and oily parts without penetration. Prevent grease crawl and staining at seams and closures in multi-wall bags. "Hold out" dope and prevent strike-through in carbonizing tissue.

**KEL-F PLASTIC FILM—FOR SEE-THROUGH, FLEXIBLE PACKAGES!** Put paints, cosmetics, pharmaceuticals, chemicals into impermeable KEL-F Brand Plastic Film packages for heavy-duty protection without bulk. It's almost completely unaffected by heat, caustics, acids, temperatures. It's moisture-proof and shatter-proof. Withstands handling, storage, shipping. Gives maximum security, endurance, good looks and convenience.

In what way can SCOTCHGARD Paper Size and KEL-F Plastic Film help you package best? Write today to 3M Chemical Division for facts. Address inquiries to 3M Chemical Division, Department KCB-30, St. Paul 6, Minnesota.

"Scotchgard" and "KEL-F" are Reg. T.M.'s of 3M Co.

CHEMICAL DIVISION

MINNESOTA MINING AND MANUFACTURING COMPANY

... WHERE RESEARCH IS THE KEY TO TOMORROW



SEE YOU at the 29th A.M.A. National Packaging Exposition, April 4-7, Convention Hall, Booths 212-218, 222-230, Atlantic City, N. J.



Packaging by Crocker has "!!!!"\*



\* a special  
Crocker  
ingredient  
for  
bouncing  
tired sales

**H. S. CROCKER CO., INC.**

1000 SAN MATEO AVE., SAN BRUNO, CALIF.

SALES OFFICES IN PRINCIPAL CITIES



*Triscilla's*  
cheese





**The answer is yes, if your containers  
bear the stamp of  
Inland Container Corporation.**

Inland's experience and facilities help our customers avoid both the dangers of marginal packaging and the expense of unnecessary "extras."

Our engineers and technical men can dramatically demonstrate and prove what the minimum packaging specifications for any product should be . . . how much protection would be sacrificed by "cutting the corners."

They also help our customers determine whether or not certain "extras" are worth what they cost. For

example, an Inland customer recently became interested in waterproofing his containers because of reports that some of them were being exposed to rain and moisture. An Inland survey revealed that very few of his containers were being exposed, and even those were affording adequate protection to the product. Therefore, even the least expensive type of waterproofing would not have been justified.

Just how good should *your* corrugated containers be? It pays to get the right answer from your Inland Package Engineer. Call him for every corrugated requirement. He is a *specialist* in his field.

Inland personnel and facilities are devoted exclusively to making quality corrugated shipping containers.



*Inland Boxes Build Good Will ...*

**INLAND CONTAINER CORPORATION**

**MILLS:** Macon, Georgia; Rome, Georgia.

**PLANTS AND SALES OFFICES:** Indianapolis, Indiana; Middletown, Ohio; Milwaukee, Wisconsin; Evansville, Indiana; Detroit, Michigan; Macon, Georgia; Erie, Pennsylvania; Ashtabula, Ohio; Orlando, Florida; Rome, Georgia; Biglerville, Pennsylvania; Chicago, Illinois; Dallas, Texas; Louisville, Kentucky.

**OTHER SALES OFFICES IN PRINCIPAL CITIES**





### how would you mark it?

Just suppose you *did* want to mark apples with good, clear prints of your trademark — at 80 or 100 a minute. First you'd have to design something to get them into position — fast enough — for marking; then you'd need a printing element to make a clear, non-damaging mark; and finally, an ink that wouldn't rub off or fade out — *and* one that would taste good!

We've never built an apple-marking machine but that isn't saying we might not someday. Just in the last ten years or so, we've had to think up more different types of marking machines, feeds and takeaways, marking processes and specialty inks than in our previous 38 years of business. This is because of all the new products and new materials in every industry — and an ever-increasing awareness of the many values of good marking for both identification and decoration.

Marking has long since ceased to be something done only when necessary — and then hit or miss. Now it can save you money, give you a competitive edge, prevent production tie-ups — *if* you've got the right method. That's our specialty — for every industry. Markem Machine Co., Keene 1, N. H.

EVERYTHING INDUSTRY NEEDS... FOR PROFITABLE MARKING... SINCE 1911 **MARKEM**





Beer labels  
are one of many types  
printed at Strawberry Hill.

## Join the growing circle who buy labels and wraps from STRAWBERRY HILL PRESS

### SOME STRAWBERRY HILL CUSTOMERS

*Anheuser-Busch, Inc.  
American Brewery, Inc.  
P. Ballantine & Sons  
The Borden Company  
Cities Service Company  
Colgate-Palmolive Company  
Falstaff Brewing Corp.  
The Globe Brewing Company  
Hershey Chocolate Corp.  
Lever Brothers Company  
P. Lorillard Company  
Philip Morris Inc.  
The National Brewing Co.  
National Distillers &  
Chemical Corp.  
The Procter & Gamble Co.*

Many of the nation's business leaders buy labels, wraps and soft packs from Strawberry Hill Press. Every day, for example, beer labels are produced by millions — on foil and paper.

Strawberry Hill's rotogravure installation is one of the most modern in the country! Intricate designs in multi-colors are run in perfect register. A comprehensive program of quality control provides constant check on every phase of production — a guarantee of satisfaction.

Strawberry Hill's letterpress division is likewise equipped for fine black and white and color work on catalogs, annual reports, folders, inserts.

Your inquiry is invited. STRAWBERRY HILL PRESS  
23-02 49th Avenue, Long Island City 1, New York  
RAvenswood 9-1603

*Printers for Big Business*





# KP

Announcing the  
compact,  
economical  
**KP-1000**  
aerosol line—  
300/600 per hour

COMPLETELY  
AIR-OPERATED...  
EXPLOSION-PROOF!

**Pack 25,000  
Aerosols  
a year?**

**THIS NEW LINE CAN MAKE MONEY FOR YOU!**

Easy to operate, compact yet complete, the semi-automatic KP-1000 comprises a piston-type filler, a crimper, and a pressure filler. Whether or not you are packaging aerosols now, or only thinking about it, you should get the facts on this economical quality equipment.

KP-Mojonnier lines have filled—and are now filling—more aerosol cans than any other make of equipment. As the most experienced specialists in aerosols, Kartridg Pak offers you a single source, with undivided responsibility, for all aerosol packaging equipment. Every unit is engineered to function with the others.

For large-volume production, Kartridg Pak automatic lines have capacities up to ten million aerosols a year.

Laboratory equipment, for pre-testing your package, can be rented and the modest rental applied on the purchase.

**Get all the facts fast!**

To have an area sales engineer call on you promptly, telephone us at Chicago, NATIONAL 5-8270, or write today.

**THE KARTRIDG PAK CO.**

Dept. G

9151 W. Fullerton Avenue Franklin Park, Illinois

**NEW "800" LINE**, the automatic single straight line. Also available as double track line for larger volume. Completely engineered throughout.



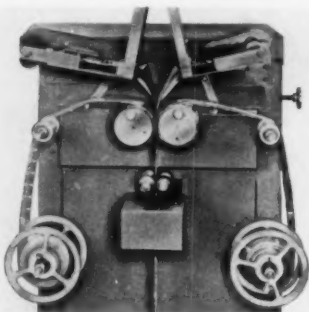


## Equipment & Materials

As in past years, new developments in machinery and materials will be introduced at AMA's 29th National Packaging Exposition, to be held April 4-7 at the Convention Hall in Atlantic City, N.J. Many of these new products available to packagers are described below. Wherever it is possible to identify them in advance with the 1960 Packaging Show, they are so identified.

### Strip-packaging machine

Now available from Mercury Heat Sealing is a strip-packaging machine that is said to operate at up to 240 units per minute. It will be introduced at the Packaging Show next month. Called Strip-O-Matic, the machine (shown



equipped with an automatic coin-dispenser attachment) can accommodate pills, capsules, tablets, small hardware items and a variety of other small products, including liquid or solid items. The packaging material can be film, foil, paper, laminates or any sealable material, says the supplier. Single- or double-web stock can be handled on the machine, which reportedly is capable of double registration, counting, automatic cut-off and signaling of product omission. Further details about the machine are offered by Mercury Heat Sealing Equipment Co., 2601-21 N. Howard St., Philadelphia 33.

### Stronger, clearer polyethylene film

Intended primarily for volume packaging uses, such as in the produce and soft-goods field, is Spencer Chemical's new polyethylene resin for film extrusion. It will be marketed as the "Poly-Eth 5300" series and will be shown for the first time at the Packaging Show next month. Among the characteristics reported for the film (which the supplier describes as "polymorphous polyethylene") are exceptional clarity, surface gloss, impact strength and tear resistance. According to the company, these properties are achieved in a specially developed process by which the growth of crystals is controlled during film extrusion. In the process, it is reported, crystals formed during extrusion remain small enough to give excellent film clarity while the degree of crystallization remains low enough to give extraordinary strength. Currently, three resins in the series (5305, 5365 and 5375) are available. The resin density of each is 0.920. The resins can be converted into film either by the blown or chill-roll casting methods, says the supplier. Spencer Chemical Co. Dwight Bldg., Kansas City 5, Mo.

### Attachment increases thermoforming speed

Comet Industries reports the availability of an automatic feed attachment for its Meteor drape-type thermoforming machine. The new attachment, to be seen at the Packaging Show next month, completely automates the machine, says the supplier. Basic features of the attachment are: automatic loading and unloading of the clamp frame, automatic feeding of roll stock and separation of blister or skin packages after the forming web is slit into strips. Greatly increased forming and packaging capacities are

achieved by the addition of the automatic feed attachment, according to the equipment manufacturer. Comet Industries, Franklin Park, Ill.

### New liquid-filling machine

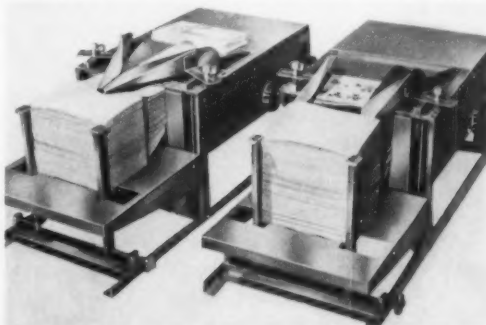
New from Ertel Engineering is the Model EGR gravity filler, especially designed for filling foaming liquids. To be demonstrated at the Packaging Show next month, the new automatic unit will fill cans, plastic bottles and other standard containers up to one-gal. capacity, with neck openings of 7/16-in. diameter and larger. The machine, which features drip-proof spouts, will not collapse or distort thin-wall plastic containers, says the manufacturer. Spout-bar adjustment is horizontally controlled by a hand-wheel. Machine design reportedly permits rapid horizontal and vertical change-over. For more information, contact Ertel Engineering Corp., Kingston, N.Y.

### Bundle-tying equipment

New machinery for tying small or large bundles has been added to Felins Tying Machine's Pak-Tyer line. It will be on view at the Packaging Show next month. The supplier's Model F-6-J is designed for tying small bundles. It automatically cross-ties at speeds up to 30 bundles per minute, says the company. The motor-driven unit is available with a wheel-mounted stand or as a table model. Also offered by the supplier is the Model F-8, which is similar to the F-6-J in appearance but is of larger capacity for tying larger-size bundles. Felins Tying Machine Co., 3351 N. 35 St., Milwaukee 16.

### Faster semi-automatic bagging

Elimination of time lost through bag-magazine reloading is one of the features cited by Tele-Sonic for its new line of semi-automatic bagging machinery. The new units will be exhibited at the Packaging Show next month. A higher-

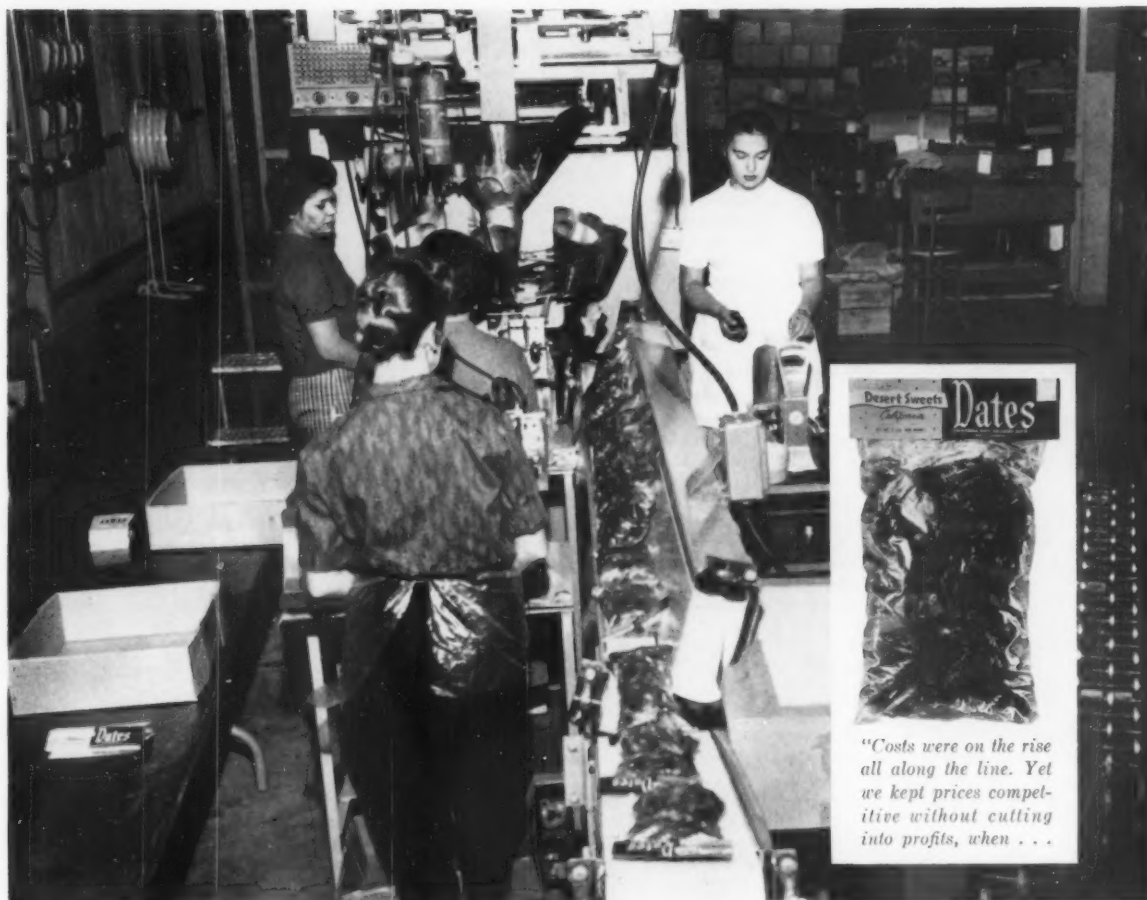


capacity magazine holds up to 10 times as many bags as previously possible, says the supplier. The new magazine also features a "rise-and-fall" principle (illustrated in the accompanying photo) that elevates the magazine platform automatically as bags are filled and removed for closure. As soon as one bag is removed, the next is automatically positioned for filling. The magazine can accommodate polyethylene or paper bags of various sizes. Tele-Sonic Packaging Corp., 208 W. 27 St., New York 1.

### Flexible fibreboard for cushioning

A resilient, flexible fibreboard for cushioning and packaging applications will be introduced at the Packaging Show next month by Celotex. The board is especially useful for





*"Costs were on the rise all along the line. Yet we kept prices competitive without cutting into profits, when . . ."*

**"We cut costs with**

**VisQueen**  
FILM

**film for automatic packaging"**

"VISQUEEN film's absolute uniformity of thickness—its superior strength and reliability—allowed California Date Growers' Association to operate 'Desert Sweet Dates' automatic packaging lines at maximum speeds for more production per man minute . . . and put an end to excessive breakage and downtime. The savings that resulted helped us fight the pressures for a price rise—or alternative cut in profit margin—occasioned by rising costs on every side.

"We found that VISQUEEN film's smooth, even, wrinkle-free winding, consistent elongation and all-around machinability, permitted us to take full advantage of the benefits of automatic packaging machines.

**AUTOMATICALLY... IT'S VISQUEEN film.** Quality controlled from basic resins to finished product by pioneer producers of polyethylene for packaging.

"Our packaging line handles 12 oz., 1 lb., and 2 lb. packages automatically, weighs the dates, and drops the filled bag onto a conveyor for sealing.

"VISQUEEN film also performs better at point of sale. Shelf life is extended. Claims for breakage and damaged merchandise have practically disappeared—a still further saving."

Hillman Youell  
Plant Mgr.

**PUT OUR EXPERIENCE TO WORK  
ON YOUR PACKAGING PROBLEMS**

**VisQueen**  
TRADE MARK film

PLASTICS DIVISION  
**VISKING COMPANY** Division of  
6733 W. 65th Street, Chicago 38, Illinois  
In Canada: **VISKING COMPANY DIVISION OF UNION CARBIDE CANADA LIMITED**, Lindsay, Ontario.  
VISKING, VISQUEEN and UNION CARBIDE are registered trademarks of Union Carbide Corporation.



Corporation  
Dept. H3



## Equipment & Materials [Continued]

applications requiring greater resiliency than that afforded by neutral-pH industrial packaging board, says the supplier. It is offered in thicknesses of  $\frac{3}{8}$ ,  $\frac{1}{2}$ , 1, 2, 3 and 4 in. According to the company, the  $\frac{3}{8}$ -in. board is flexible enough to bend over a 14-in.-diameter cylinder without breaking, and the  $\frac{1}{2}$ -in. board can be curved over a 22-in.-diameter cylinder without damage. Because of this bendability, plus the board's resiliency, it is suggested for use as interior packaging for fragile or irregular-shaped items. Additional information is available from *The Celotex Corp.*, 120 S. La Salle St., Chicago 3.

### Polyethylene-bag-making machine

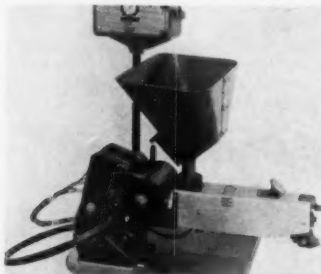
The Simplex Plant of FMC has developed a new 24-in.-wide side-weld polyethylene-bag-making machine. Called the Model 100, it can be seen at the Packaging Show next month. The supplier reports that the machine is useful for both large and small converters requiring production flexibility and ease of set-up. Draw section, drive and sealing area are combined in the unit's compact chassis. This feature, says the company, permits short drive components and film paths to provide maximum control of bag size and low production costs. Attachments included with the machine are a gripper-stacker, a counter and an indexer. Bags ranging in size from  $3\frac{1}{4}$  by  $3\frac{1}{4}$  in. to 15 by 24 in. can be produced. Operating speed of the machine is up to 5,000 bags per hour, according to the supplier. *FMC Packaging Machinery Div.*, Simplex Plant, Oakland 6, Calif.

### Versatile new coding attachment

Bell-Mark's new printing and coding attachment, for multi-purpose use on production- and packaging-line machinery, will be introduced at the Packaging Show next month. Called the Model 1240, it imprints product descriptions, price information or other desired data. Designed to imprint bands up to  $1\frac{3}{4}$  in. wide, the unit has a 12-in. printing circumference. When used with special non-smudge inks, says the supplier, the attachment will imprint cellophane, polyethylene, glassine and other hard-to-print surfaces in a variety of colors. It can be attached to any production unit, but the imprinter is equipped with its own gear system and adjustment levers for controlling ink distribution. The company points out that the attachment utilizes the flexographic-press principle, with an ink fountain that requires only one filling per day for normal production needs. *Bell-Mark Corp.*, 92 S. Sixth St., Newark 7.

### High-speed adhesive extrusion

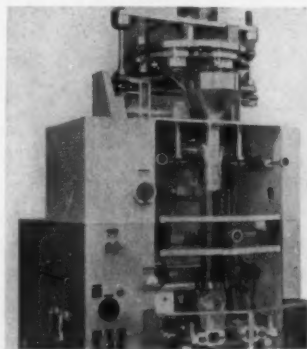
Among the equipment to be exhibited by Potdevin at the Packaging Show next month is the new Model SE hot-melt seam extruder. Designed for use as an attachment to



web machines, it reportedly permits high-speed production use of strongly bondable solid adhesives. In action, the extruder instantaneously melts the solid adhesive and applies it in molten form directly to web-fed material. Adhesive hardening also is instantaneous, says the supplier. The attachment, which takes its drive from the parent machine, has its own controls for starting and stopping and for regulation of the stream of molten adhesive. Adhesive is fed as needed, synchronized with web speed. A hopper holds either granular or pelleted forms of hot-melt adhesive. For further information on the unit, contact the supplier. *Potdevin Machine Co.*, Teterboro, N.J.

### Fast bag-former, filler, sealer

Package Machinery Co. will demonstrate its new Trans-wrap S-750 bag-forming, filling and sealing machine in Spencer Chemical Co.'s booth at the Packaging Show next month. It will be shown running polyethylene film to form a  $6\frac{1}{2}$ -by-9-in. bag (the size used for 2-lb. frozen-food packages). The new unit can form bags ranging from 3 to 15 in. long and 2 to  $8\frac{1}{2}$  in. wide. Forming, filling and sealing speed within this range is up to 75 bags per minute, says the supplier.



Economy in materials is achieved, the company reports, through an improved impulse end-sealing method by which wire cut-off makes clean  $\frac{1}{8}$ -in. seals. Faster drawbar action is reported to speed up the bag-forming operation. Other features cited for the new machine include: simple speed adjustment; centralized pushbutton controls; strong, wrinkle-free seals, achieved by spring spreaders; change-over time of less than 15 min.; full-view safety doors of Plexiglas, and ease of cleaning. *Package Machinery Co.*, East Longmeadow, Mass.

### Compact new label applicator

A compact new label applicator, the Model 100, will be introduced by Kleen-Stik at the Packaging Show next month. The unit (11 in. high, 16 in. long and 10 in. wide) reportedly can be installed easily and requires a minimum of adjustments. It applies labels to the moving production line and, according to its supplier, it does not require time-consuming stops and starts. The device applies knife-cut as well as die-cut labels, eliminating the need for spacing between labels. *Kleen-Stik Products, Inc.*, 3700 W. Wilson Ave., Chicago 31.

### Imprinter for carton flats

Imprinting speeds up to 7,000 per hour are claimed by B. Verner & Co. for its new Model FR Multipress imprinting and marking machine. Continuous automatic feeding and letterpress impression of high quality are other features cited by the machine's supplier. The new unit will be demonstrated at the Packaging Show next month, running flat folded cartons and other items of paper goods and containers. Any desired information can be imprinted by the machine, says its supplier. *B. Verner & Co.*, 52 Duane St., New York 7.

### Powder-spray gun for printing presses

Of interest to printers and converters is the new model Pneuma-Flo powder-spray gun which will be displayed at the Packaging Show next month by Pneuma-Flo Systems. Designated the 20 Line Series, the new gun has four times the capacity of its previous model, says the company. Together with a refillable aluminum container, the spray gun is mounted on a printing press where it is reported to give a continuously uniform spray. Among the attachment's cited advantages are: ease and speed of filling; powder-level visibility, and low-pressure operation with constant powder volume, either continuous or intermittent. *Pneuma-Flo Systems, Inc.*, 127 W. 24 St., New York 11.

### Improvements in package cushioning

Improved materials for interior packaging have been reported by Cel-Fibe. They will be on view at the Packaging Show next month. Among them are new flame-retardant (Continued on page 244)



# YOUR PROFITS ARE IN THE BAG

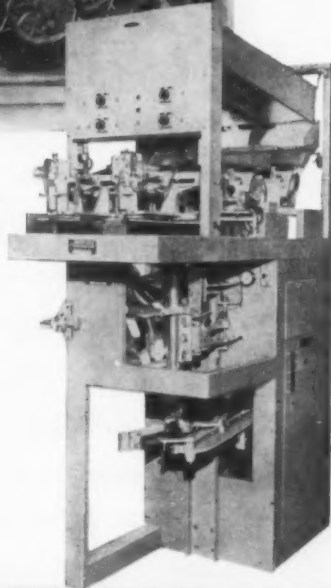
Streamlined MERCURY efficiency for a big lift in production and a big drop in labor costs. Compact and efficient machines taking a minimum of space and giving a maximum of satisfaction.

SEE US AT BOOTH 370  
Atlantic City



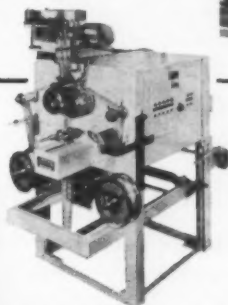
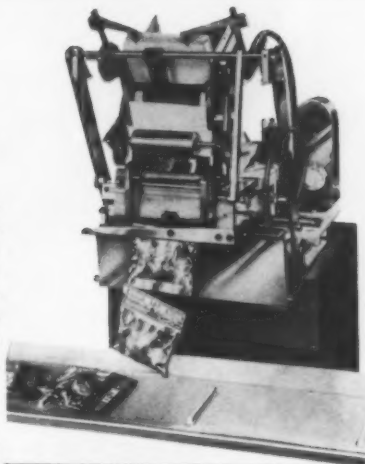
## Verti-Pak

Automatically forms, weighs, fills and seals bags. Fully automatic; perfect weighing accuracy. Packaging flexibility. Attachments for every packaging application.



## VLS-12 Label Sealer

All-in-one operation. Safe, foolproof label sealers fold, seals and saddles labels up to 10½" wide. Available with Hole Punch, Date Coder and Automatic Price Imprinter. For Poly as well as Cellophane and "K" Film.



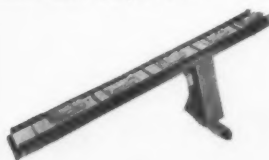
## STRIP-O-MATIC

For multi-packaging in individual compartments, liquids, powders, tablets and other small products.



## POLY & CELLO SEALER

Foot-operated Heat-Sealer for cellophane and other heat-sealing papers and foils. Uniform pressure; accurate heat control; single operation.



## Conveyor & Accumulating Table

Engineered to service specially required transfer of your finished package. A design to satisfy every conveyor need. New belt flights prevent sliding and punching.

**SEND US A SAMPLE OF YOUR PRODUCT TODAY!**

We'll determine which stock MERCURY machine will serve your needs best. For special problems we will modify a standard machine. Finished samples will be submitted for your consideration.

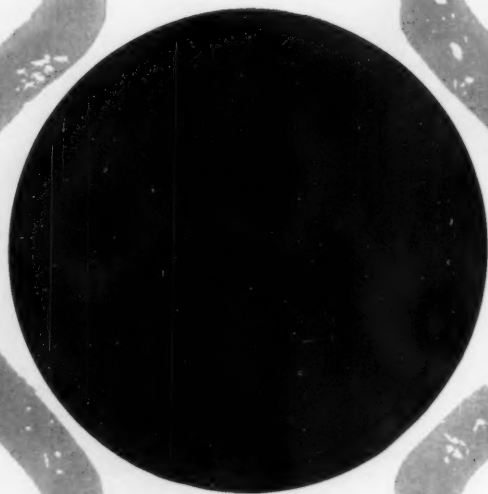
# MERCURY



HEAT SEALING EQUIPMENT CO.

2601 N. HOWARD ST • PHILA. 33, PA.





**are you  
still designing  
square  
packages for  
round  
products  
... when Keyes  
custom contour  
packaging  
can cut costs,  
cubage and  
breakage**



**You** can eliminate fillers and dividers while providing better protection against shock by using molded pulp packaging. Keyes can produce contour packaging to your specifications.

**For free consultation  
on your packaging problems,  
write Product Development  
Division, Keyes Fibre Company,  
Dept. MP-3, Waterville, Maine.**





*There's Special*  
**SALES  
 APPEAL**  
 with  
**CLEVELAND  
 C-THRU  
 CONTAINERS**



....and they combine 5 important packaging advantages:

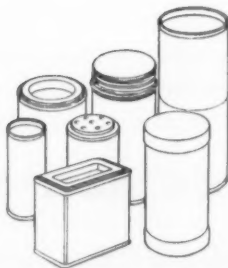
- ★ **DISPLAY OF YOUR PRODUCT**
- ★ **ELIMINATE DOUBLE LABELING**
- ★ **BETTER PROTECTION IN HANDLING**
- ★ **ADD EXCITEMENT TO YOUR PRODUCT**
- ★ **CREATE NEW SALES POWER**

The Mark Allen Company, makers of "Vogue House Cologne," is one of the manufacturers in the cosmetic and drug industry to profit from the new outstanding advantages of C-THRU containers. Constructed of clear spirally-wound plastic, they are available in sizes from  $\frac{3}{8}$ " in diameter. You may have the choice of gaily colored bands, plain or imprinted if desired. There is a wide range of closures

and plugs in various types and sizes. These may be in plastic, metal or paper. The container illustrated above features a top and bottom of curled and disced paper. Cleveland C-THRU containers are designed for a large variety of products that must sell on sight. Ask our Engineering Department for the latest ideas in a container made especially for your product.

**IF YOU ARE ATTENDING THE PACKAGING SHOW IN ATLANTIC CITY,  
 APRIL 4-7, BE SURE TO VISIT OUR EXHIBIT.**

*Investigate the  
 complete line of  
 Cleveland Containers.  
 Write for our latest  
 packaging brochure.*



THE  
**CLEVELAND CONTAINER**  
 COMPANY

Plants and  
 Sales Offices:  
 Cleveland  
 Detroit  
 Chicago  
 Memphis  
 Los Angeles  
 Plymouth, Wis.  
 Jamesburg, N. J.  
 Fair Lawn, N. J.

6201 BARBERTON AVE. • CLEVELAND 2, OHIO

ALL-FIBRE CANS • COMBINATION METAL AND PAPER CANS  
 SPIRALLY WOUND TUBES AND CORES FOR ALL PURPOSES

**CLEVELAND CONTAINER CANADA, LIMITED**  
 Plants & Sales Offices: Toronto & Prescott, Ont. • Sales Office: Montreal

Sales Offices:  
 New York City  
 Washington, D.C.  
 Rochester, N. Y.  
 West Hartford,  
 Conn.  
 •  
 Abrasive  
 Division  
 at Cleveland





**Sealed-in freshness!** Escon polypropylene, brilliant see-through wrapping, helps seal in freshness thanks to its low moisture vapor transmission. Its excellent handling qualities make it ideal for high-speed packaging.



**Long shelf life!** When used as an overwrap, Escon contributes to long shelf life of candy, cookies, cigarettes and other semi-perishable products. Its brilliant transparency adds eye-and-buy appeal.



**Good show!** Escon clear packaging film shows the product at its natural best. Since it can be color printed on either or both sides, Escon provides an opportunity for attractive packaging design of many items.



**Heat resistance!** Escon-packaged gauze pads and other medical dressings can be sterilized by autoclaving. Can Escon's high heat resistance give you the opportunity to add "sterile" to your product label?

## Escon\* POLYPROPYLENE HELPS ADD

Escon film can give your product maximum sales appeal. And no wonder — Escon makes a packaging film of extreme clarity, uniform quality and high surface gloss.

Escon can be extruded into flat film using either the water bath or chill roll technique. It offers the packaging engineer many advantages including good vapor barrier properties plus greater heat resistance than any other polyolefin.

### EXCITING NEW PRODUCTS

**ENJAY COMPANY, INC.,** 15 West 51st Street, New York 19, N. Y.





## THE PRODUCT TO HER BUYING LIST

Escon clear film can be color printed—and reverse printing adds sparkle to the package. Escon also exhibits a wide heat sealing range that allows the packager to vary the degree of seal from a light “tack” to a strong weld.

The modern technical service laboratories of the Enjay Company can help you produce attractive packaging through efficient use of Escon polypropylene.

\*Trademark

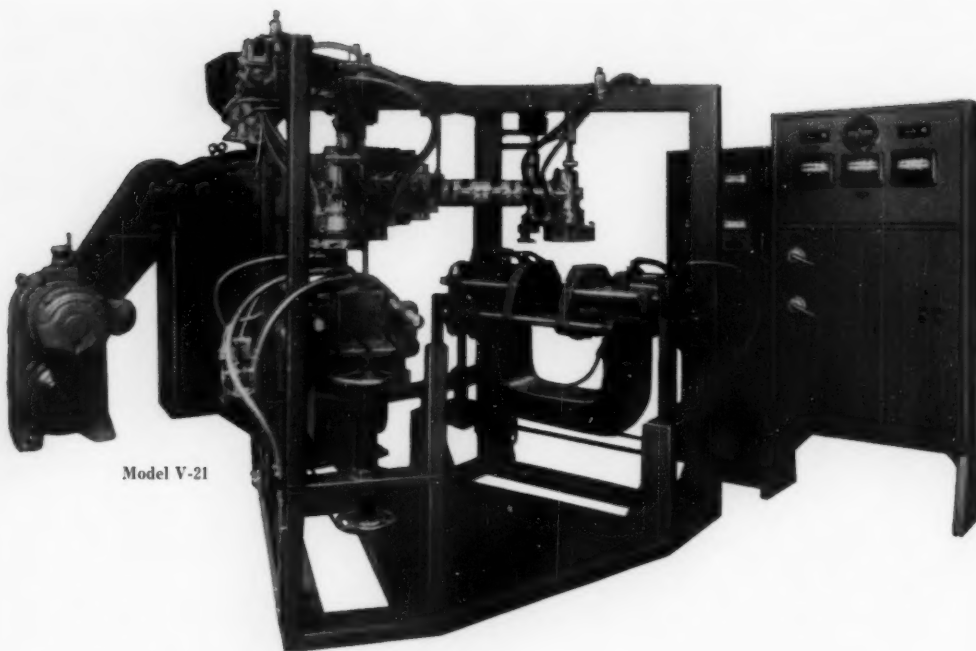
### **THROUGH PETRO-CHEMISTRY**

*Akron • Boston • Charlotte • Chicago • Detroit • Los Angeles • New Orleans • Tulsa • Toronto*

*For technical assistance or to order Escon, contact the Enjay office nearest you.*







Model V-21

# ANNOUNCING MPM DIVERSAMATIC TWIN-STATION BLOW MOLDING EQUIPMENT

To satisfy the high degree of technical excellence sought by the plastics industry, Modern Plastic Machinery Corporation introduces blow molding equipment of advanced design. Emerging from MPM's integrated development and manufacturing facilities comes the Diversamatic line of plastic production equipment. Now, molders who desire finest quality machinery can obtain complete systems of extruders and *royalty-free* blow molding equipment from one source—a respected company, known for products incorporating engineering sophistication and possessing highest performance reliability.



**MODERN PLASTIC  
MACHINERY CORP.**

64 Lakeview Avenue, Clifton, N. J.  
GRegory 3-6218 • Cable Address: MODPLASEX

MPM's Diversamatic Blow Molding Equipment may be inspected at the 1960 AMA PACKAGING SHOW, BOOTH #1527 and, thereafter, at the company's plant in Clifton, New Jersey. Inquiry is invited.

60-2 ©1960 Modern Plastic Machinery Corp.





## People Reach for the Packages that Promise Most

The sales success of these packages proves their ability to promise satisfaction (and keep that promise) time after time.

Pictured are only a few of the hundreds of sales-winning packages we produce for America's leading brands. We'd like to send you our booklet showing how we can put *promise* into your packaging. Ask, too, for product information on any of these packages in which you are particularly interested. Drop a note to Warren Townsend, 2101 Williams Street, San Leandro, California.

Packaging for  
all America



### CROWN ZELLERBACH

WESTERN-WAXIDE DIVISION

In Canada address product inquiries to Crown Zellerbach Canada Limited, Vancouver, B. C.







## ***Food Processor Cuts Costs with Atkron-Dumore Can Sorter-Uncaser!***

Fischer-Spiegel, Inc., of Geneva, Ohio, private brand processors and packers of fruit concentrates and juices for many of the world's largest companies, enjoys an annual production in excess of two million cases. Since it began operations in 1946, with a plant area of 1,800 square feet, the company has increased its operations to 60,000 square feet.

To build this volume of business, Fischer-Spiegel obviously had to be on its toes . . . constantly seeking ways to increase production and successfully combat rising costs.

Fischer-Spiegel took one major step in this direction, by installing the ATKRON-DUMORE CUS 4.5 Can Sorter-Uncaser. With this unit, a two-man team *now* does twice the work that had required seven! One man picks up skids of cans in the warehouse and loads them on the Infeed Conveyor . . . the second man supervises the operation of the Can Sorter-Uncaser. This same two-man team has time to handle all changeovers of the unit.

The ATKRON-DUMORE Can Sorter-Uncaser also saves Fischer-Spiegel time and money, by making it possible to handle cans in various sizes with only minutes required for changeovers.

The ATKRON-DUMORE Can Sorter-Uncaser is *more than paying for itself!* Continuous motion eliminates costly stoppages, space requirements are minimized, lithographed cans are protected, and open end cans guarded against damage. *In addition, the ATKRON-DUMORE Can Sorter-Uncaser can handle reshipper cartons, shipper trays, bags or bulk . . . with amazing efficiency!*

Profit from the experience of Fischer-Spiegel. Write for information on other Atkron-Dumore equipment including: Flap Openers, Case Packers, Case Cleaners, Full and Half Depth Uncasers. *This can easily make the difference between profit and loss in your plant.*

# **ATKRON DUMORE**

MANUFACTURED BY ATKRON, INC., CUYAHOGA FALLS, OHIO

Distributed  
and Serviced  
exclusively by



**ECONOMIC MACHINERY CO. WORCESTER 3, MASS.**

Division of Geo. J. Meyer Manufacturing Co.

**GEO. J. MEYER MANUFACTURING CO. MILWAUKEE, WIS.**

AT-159-97



*Specify*



**the  
NEXT TIME  
YOU BUY  
Corrugated  
Cartons**

"Hinge-Fold", a new concept of corrugated creasing and folding, produces cartons which set new standards of strength, accuracy and uniformity.

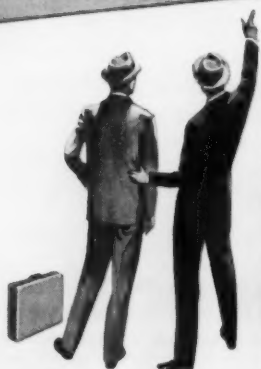
The development which makes these cartons available NOW is a unique creasing method which forms a double hinge. This double hinge has the effect of forming the corrugated board into a column which prevents compression of the inner liner and stretching of the outer liner when folded.

Cartons produced in this manner have increased top compression strength, and resist folding fractures . . . even when stored in dry places. Hinge-Fold eliminates the folding fractures which result from the abrasion and tearing action of knife-edge scoring wheels which have long plagued the industry.

Proof of these statements is embodied in a report issued by Container Laboratories Inc. which is available to you upon request.

  
**The international**  
PAPER BOX MACHINE COMPANY  
315 MAIN STREET, NASHUA, NEW HAMPSHIRE





**Ucon** brand propellants put action in products



*Why don't you discover Ucon Propellant service, too?*

**UNION CARBIDE CHEMICALS COMPANY**

Division of Union Carbide Corporation  
30 East 42nd Street, New York 17, N. Y.

Ucon and UNION CARBIDE are registered trade marks of Union Carbide Corporation



**NOW**—there's practically **NO LIMIT** to  
the types of flexible films  
you can Speed-Wrap and Heat-Seal on the  
*...INCLUDING SHRINK FILMS!*



**HEAT SEALS**  
up to 160 units  
per minute with...

- POLYETHYLENE  
(High and Low Densities)
- POLYPROPYLENE
- POLYSTYRENE
- POLYVINYL  
CHLORIDE (PVC)
- PLIOFILM
- K FILMS
- CELLOPHANE
- SARAN
- CRY-O-VAC
- VIDENE

**H**igh speed packaging up to 160 units per minute with almost every type of heat-sealable flexible material—including shrink films—is now possible on the CAMPBELL Wrapper. Exclusive method of "float" wrapping from continuously fed roll stock permits trouble-free packaging production without static interference slow down or stoppage as in many reciprocating or sheet fed processes. It also minimizes product damage and waste. Constant automatically regulated heaters and controlled dwell-time insure positive longitudinal and cross-sealing of

all materials. Special tunnel attachment provides for shrink films. Let us show you how the CAMPBELL Wrapper can wrap and seal an amazing range of product shapes in neat, close-fitting attractive wraps in less time, with less labor and with less material.

**Quick Conversion from Poly to Cello**

A capable machine operator can convert from Poly to Cellophane by simply installing a set of crimpers with heaters and a stationary tube sealing unit — all in less than 30 minutes!



*Putting Ideas to Work*

**FOOD MACHINERY AND CHEMICAL CORPORATION**  
**FMC Packaging Machinery Division**

Hudson-Sharp Machine Company  
1201 MAIN STREET, GREEN BAY, WISCONSIN



*NOW, for paper products...*  
a packaging film with BOTH



**SHOWMANSHIP** comes to paper products packaged in new AviSun Olefane! The clarity and sparkle make an appealing, eye-catching "showcase" for your goods. The "feel" is warm, pleasant, inviting. Just the right flexure, too... neither limp nor too stiff. What's more, Olefane's showmanship lasts—even after long storage under adverse atmospheric conditions. It is unaffected by changes in humidity—doesn't absorb moisture, change dimensions or become brittle! Yes, AviSun Olefane shows off your products with greater sales appeal... keeps them new-looking longer!

**AVISUN TECHNICAL SPECIALISTS** can answer your specific questions... and help you plan for better packaging at lower cost with Olefane film.

**CUSTOMER SERVICE.** AviSun Corporation, 301 Post Road, MARCUS HOOK, PA.



**AviSun**

\*a trademark of AviSun Corp.



# showmanship and stamina!



**STAMINA** is an important characteristic of AviSun Olefane. This brawny new film will take a lot of punishment in shipping and on the shelf. High tensile strength gives stronger wraps from thinner gauges. Superior abrasion resistance maintains gloss and transparency. Olefane has good stiffness. Even lighter gauges perform at advantageous speeds on packaging machines designed for thermoplastic films. Another plus . . . Olefane's light weight gives you more film per pound than any other packaging film—a real opportunity for substantial savings in packaging costs . . . Mail coupon today.

# OLEFANE\*

POLYPROPYLENE FILM

**AviSUN Corporation**  
301 Post Road, Marcus Hook, Pa.

Please send me latest complete information covering Olefane Polypropylene film.

NAME \_\_\_\_\_  
Please Print  
COMPANY \_\_\_\_\_ POSITION \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_



# FOR PRIZE PACKAGE

LETTERPRESS, LITHOGRAPHIC



**PRINTING INKS** can put *your* product in the winner's circle with *prize package performance* because it's the *ink* that attracts! And that's the first step towards prize winning packages and *increased sales* at the point of purchase—where customers cast their votes with their cash.

Over the years, GPI has helped provide this kind of *prize performance* for a wide variety of packages printed by every type of process on every kind of material. GPI's complete printing ink line means one call for all your needs. That's why it pays to *identify* and *beautify* with GPI.

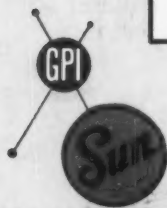


# PERFORMANCE

GRAVURE and FLEXOGRAPHIC INKS



Visit our exhibit *booths #542 & 546* at the Packaging Show—  
*April 4th thru 7th, 1960*, and our Hospitality Suite at the Pent-  
house, Shelburne Hotel, Atlantic City, New Jersey.



Branches in all principal cities

**GENERAL PRINTING INK**

DIVISION

**Sun Chemical Corporation**

750 Third Avenue, New York 17, N. Y.





THE BEST REASON TO TRUST PRECISION WITH YOUR PRODUCT

\* **100  
BILLION  
SUCCESSSES  
WITH  
THIS  
VALVE**

**PERFORMANCE-PROVEN ON EVERY  
TYPE OF PRESSURIZED PRODUCT**



On October 18, 1959 at 10:25 in the morning, Precision Valve Corporation produced its one billionth aerosol valve. Ten years of research, study and experience went into its creation and in those same ten years, the aerosol package came of age.

Today, almost any product that can be poured or powdered can be dispensed in an aerosol . . . always dispensed with greater ease and more convenience, usually at less cost.

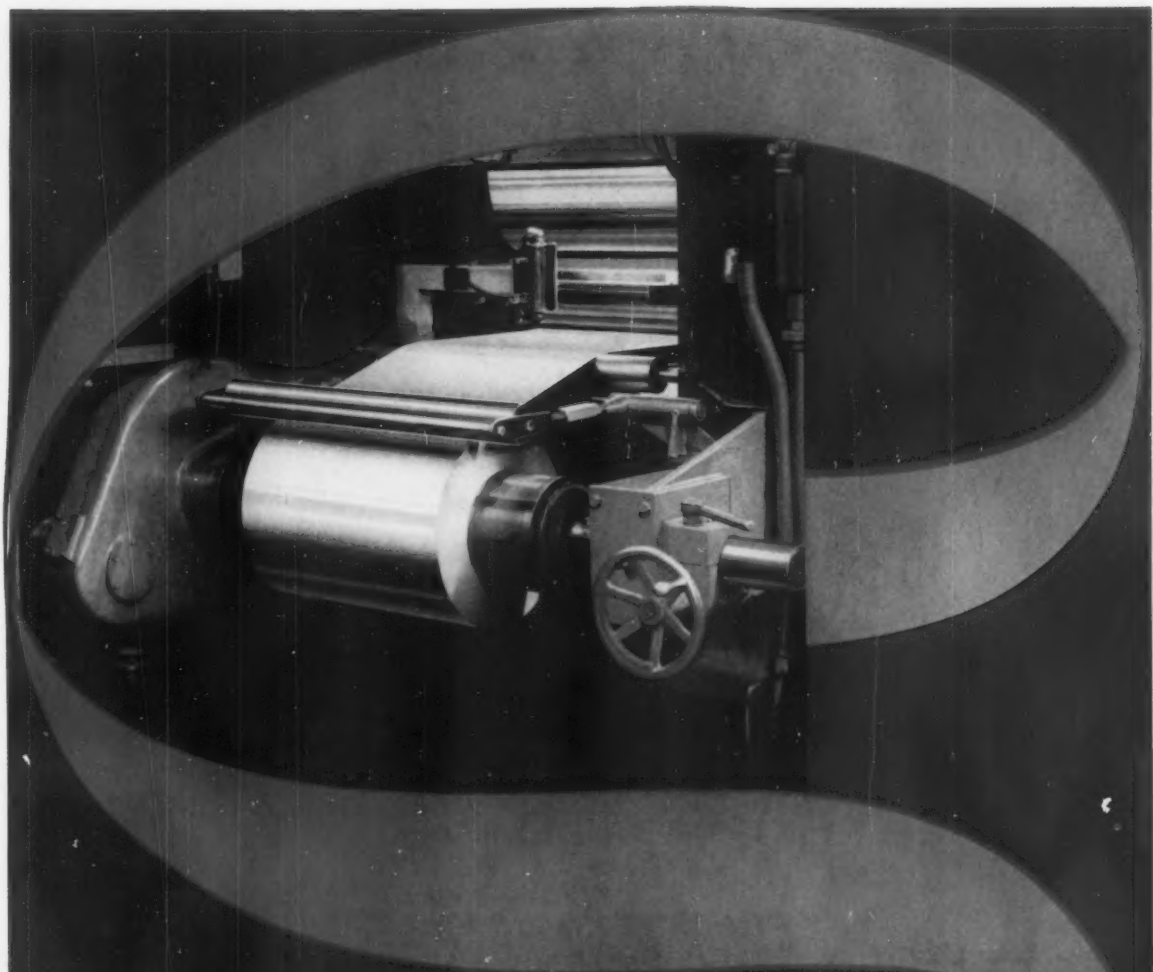
Precision Valve Corporation's Research Department will be happy to help you build a better package for your product with the valve of proven quality.



*\* Calculated on the basis of about 100 actuations per aerosol . . . from the 56 uses of an air sanitizer through the 198 times actuated tooth paste container, not including foreign production.*

**PRECISION VALVE CORPORATION**  
700 NEPPERHAN AVE., YONKERS, N. Y. • ZURICH





## Foil Plus

An independent producer with one of the most modern plants in the Nation, Aluminum Foils, Inc. offers completely integrated production beginning with our casting facilities. We supply highest quality foil in widths up to 40 inches, gauges from .0002" through .006" and in all tempers and finishes. In addition, our outstanding chemical and metallurgical staffs will be interested in helping you solve present problems or perfect new processes. Just write or call

## ALUMINUM FOILS, INC.

JACKSON, TENN.

155 East 44th St.  
New York, N. Y.

Hanna Building  
1422 Euclid Ave.  
Cleveland, Ohio

69 W. Washington  
Chicago, Ill.

Meadows Building  
North Central Exp.  
Dallas, Texas

Box 325  
La Habra, Calif.



Aluminum Foils, Inc. also has the only plant in the United States devoted exclusively to the production of Raffinal<sup>®</sup>, the ultra high purity aluminum guaranteed 99.992 per cent pure.





# "A stroke

"Our idea of sending out  
samples in plastic boxes  
— a stroke of genius."

Name of company submitted  
upon request

NEW YORK CITY  
1022 Empire State Bldg.  
CHickering 4-8892



# of Genius"...

## that's what the man said!

When one of our large accounts started packaging their products in distinctive plastic boxes by Diamond, results were so astounding that the comment of their own sales force was, "a stroke of genius!" Diamond plastic boxes will do the same for you . . . add more "sell" to your product by enhancing its own sales appeal. You may choose a package that's crystal clear, distinctive tutone, or completely

opaque, as you prefer. Diamond has them in the world's largest assortment of small plastic boxes with an exclusive patented hinge in more than 120 different sizes and in 10 colors. They're immediately available, too, by the gross or by the millions. Remember, Diamond packaging is rigid packaging at its very best — at surprisingly low cost.

You, too, can be a genius at increasing sales. All you have to do is take a tip from our happy customers who have been amazed at results they have obtained from packaging in Diamond plastic boxes. Our packaging engineers are ready to assist you, without obligation.

*Write for sample boxes and price list*

*Diamond Plastics Industries*  
**INCORPORATED**

P. O. BOX 326 • ROANOKE, VIRGINIA • PHONE DI 3-2456



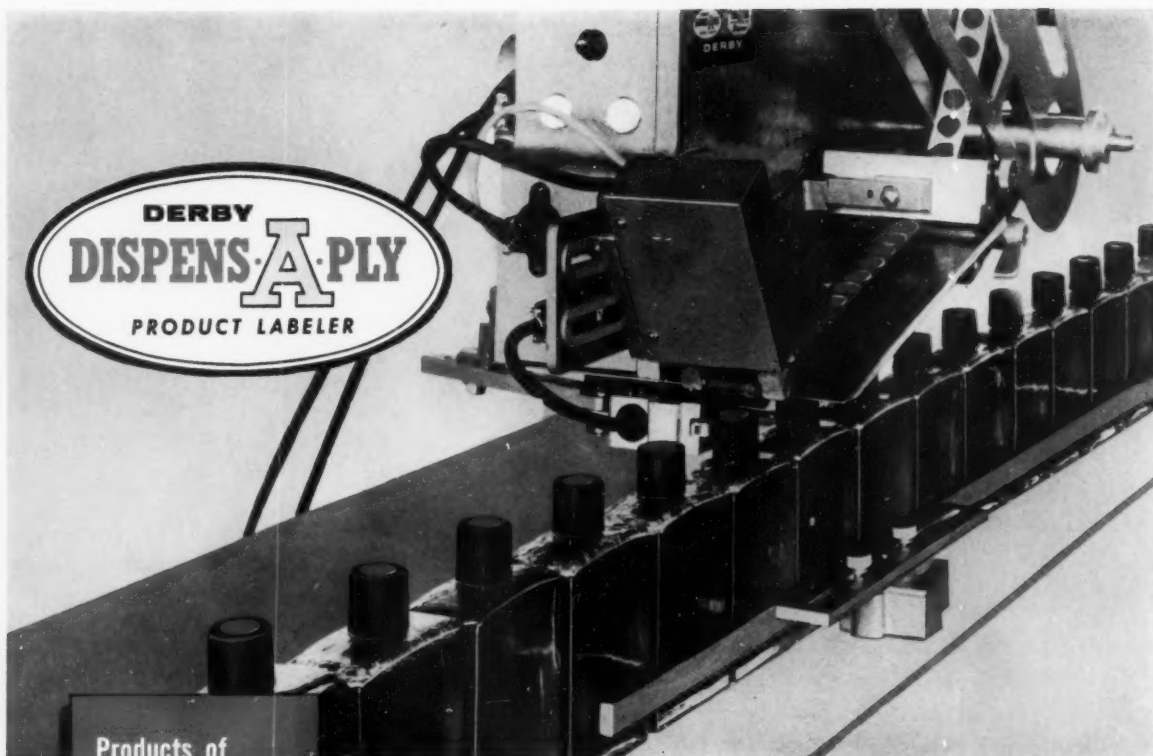
LOS ANGELES 16, CALIF.  
5974 W. Jefferson Blvd.  
Upton 0-8767

CHICAGO, ILL.  
Suite 364 Wrigley Bldg.  
410 N. Michigan Ave.  
DElaware 7-2172

CAMBRIDGE, MASS.  
12 Norfolk St.  
Kirkland 7-0670

ST. LOUIS 5, MO.  
Siteman Bldg., Suite 424  
111 S. Bemiston Ave.  
Parkview 6-0296





Products of  
Many Shapes...  
Many Sizes...  
are labeled  
*Automatically*  
by Derby  
Dispens-A-Ply



## Bring *Versatile Automation* to your labeling operation!

Speed Production Labeling . . . Cut Costs to a Fraction!

With the Dispens-A-Ply Product Labeler, Derby has created an entirely new concept of truly efficient production labeling . . . combining speed of application with accuracy of placement at lower costs. The versatility of the Dispens-A-Ply is exhibited by the wide variety of products that have been labeled or pre-priced with minimum of changeover time. Write for more information about this great advance in pressure-sensitive product labeling.

See the Derby Dispens-A-Ply in action at the 29th National Packaging Exposition in Atlantic City, April 4-7, Booth #325

**DERBY SEALERS, Inc.**  
**DERBY, CONNECTICUT**

Designers and Manufacturers of the World's Finest Water Soluble and Pressure-Sensitive Tape and Label Dispensers



**SCREW CAPS**  
Ideally suited for liquids  
as well as dry products

**TELESCOPIC AND  
PLUG TYPE CAPS**  
For hydrosopic products

**SNAP CAPS**  
Especially suitable for your  
deluxe line of dry products

**ALUMINUM SEALS**  
Sure, sanitary containers  
for your injectables

## KIMBLE SHORT VIALS...

**convenience packaging for you and your customers**

**Convenience for you:** New distinctive squat design of these containers makes for greater stability on automatic, high-speed filling lines.

**Convenience for your customers:** New compact styling makes Kimble Short Vials less likely to tip or spill.

Space-saving Kimble Short Vials are lightweight and optically clear. Uni-

form glass distribution provides uniform filling points.

To help make your product stand out from others, your Kimble Short Vials may be distinctively identified with clear, permanent ACL labeling. ACL is fused right into the glass.

Tight-fitting Kimble closures keep your product fresh and clean . . . free

from dust...keep out dirt and moisture.

Let Kimble put its extensive pharmaceutical packaging experience to work for you in helping solve packaging problems. . . . Ask to see Kimble Drug Sample Packaging Study.

Write to Kimble Glass Company, subsidiary of Owens-Illinois, Dept. DT-2, Toledo 1, Ohio.

**KIMBLE CONTAINERS**  
AN **®** PRODUCT

**OWENS-ILLINOIS**  
GENERAL OFFICES • TOLEDO 1, OHIO





New,  
shrinkable,  
oriented

## REYNOLON<sup>®</sup> PVC FILM

for clear, skin-tight, economical  
packaging of a variety of products

New Reynolon oriented PVC film offers an ideal solution to better, less costly packaging of many food items—meats, poultry, cheese, fruits, vegetables plus a wide variety of other items such as window shades, stationery supplies, paper products and others.

In addition to economy this new Reynolon film also offers you these advantages: It is crystal clear. It is shrinkable—provides a skin-tight package. It has high tensile strength, offers low temperature flexibility, has good shelf life. It is printable and sealable by heat or by adhesives. It can be metalized. It is easily laminated to paper, chipboard and other materials.

For details and technical assistance on Reynolon films, contact the Reynolon Plastic Specialist in the Reynolds office in New York, Camden, Detroit, Chicago, St. Louis or Los Angeles. Or write *Plastics Division, Reynolds Metals Company, P. O. Box 2346-RM, Richmond 18, Virginia.*

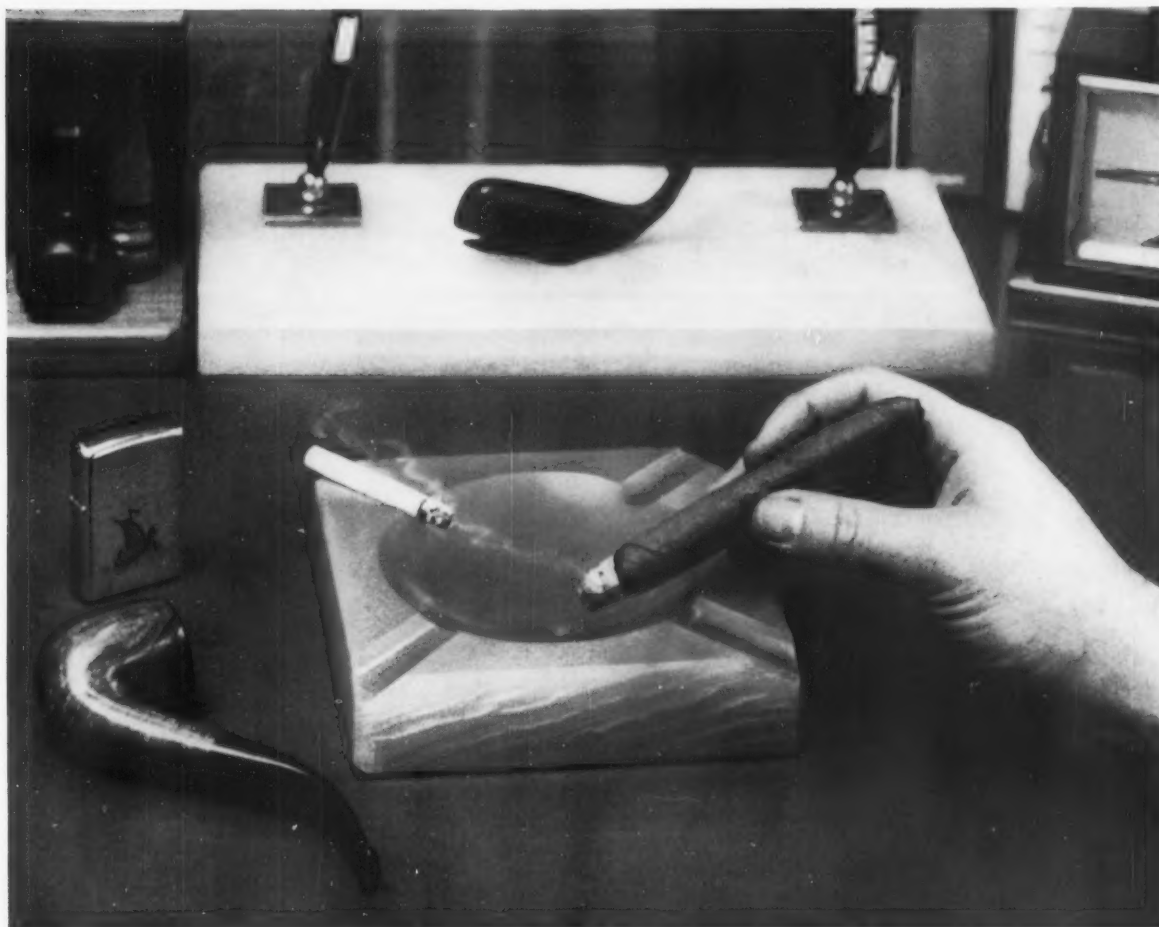


See Reynolds Exhibit  
at Booth 330, AMA National  
Packaging Exposition, April 4-7,  
Convention Hall, Atlantic City, N. J.

PLASTICS DIVISION  
REYNOLDS METALS COMPANY



*Serving the tobacco industry world-wide*



*Quality machinery—for over 40 years!*

Designers and builders of automatic packaging machinery for  
bundling, banding, high-speed wrapping and multiple-wrapping



**SCANDIA**

**PACKAGING MACHINERY COMPANY**

500 Belleville Turnpike • North Arlington, New Jersey, WYman 1-8400



**Clearsite\***

# STOCK PLASTIC VIALS

## RIGID POLYSTYRENE MOLDED VIALS . . .

These Clearsite rigid polystyrene vials are perhaps the most generally useful of all "stock" plastic containers. They are available in crystal clear or, on special order, in any of a wide range of jewel-like colors. Multi-color printing of your label or trademark on these vials gives you a "custom package" at lowest cost.

$\frac{3}{8}$ " (10½ MM)



¾" 1¼" 1¾" 2" 3"

$\frac{1}{2}$ " (15 MM)



¾" 1¼" 2" 3" 3¾"

$\frac{5}{8}$ " (18 MM)



2"

$\frac{3}{4}$ " (22 MM)



2" 3¾"

$\frac{7}{8}$ " (26 MM)



2½" 3" 3½"

1" (30 MM)



2" 3" 3½" 4"

1¼" (38 MM)



2" 3" 4"

1¾" (48 MM)



3"

2" (63 MM)



4"

6"

1½" (38 MM)

### SHELL VIALS

These vials are supplied with plug closures as illustrated.



2" 2½"

### APOTHECARY VIALS



½ oz. 1 oz.

\*Available threaded style only. All other vials in shoulder (as pictured) and threaded styles.

**CELLUPLASTIC CORPORATION**

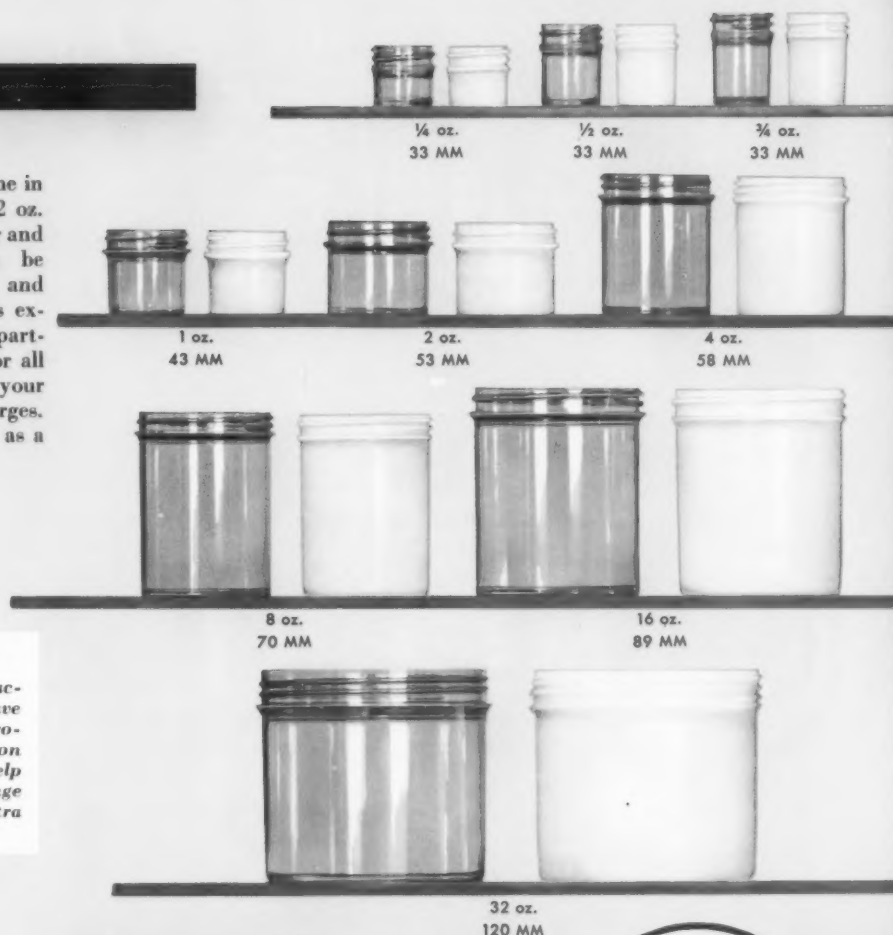


# WIDE JARS FOR EVERY NEED

*Clearsite\**

## SQUAT JARS

Shatterproof Clearsite squat jars come in 9 sizes:  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1, 2, 4, 8, 16, 32 oz. They are available from stock in clear and natural linear polyethylene. Can be molded in a wide range of colors and multi-color printed by Celluplastic's extensive and experienced printing department. Standard closures available for all sizes. Clearsite squat jars reduce your packaging costs and shipping charges. They weigh about one-fifth as much as a glass jar of equivalent capacity.



## MULTI-COLOR PRINTING

Celluplastic Corporation, manufacturers of Clearsite vials and jars, have the finest printing facilities for reproducing your label or trademark on any vial or jar. We will be glad to help you prepare an outstanding package for your product—to give you extra "sell" at low cost.

## FLEXIBLE VIALS AND EXTRUSIONS

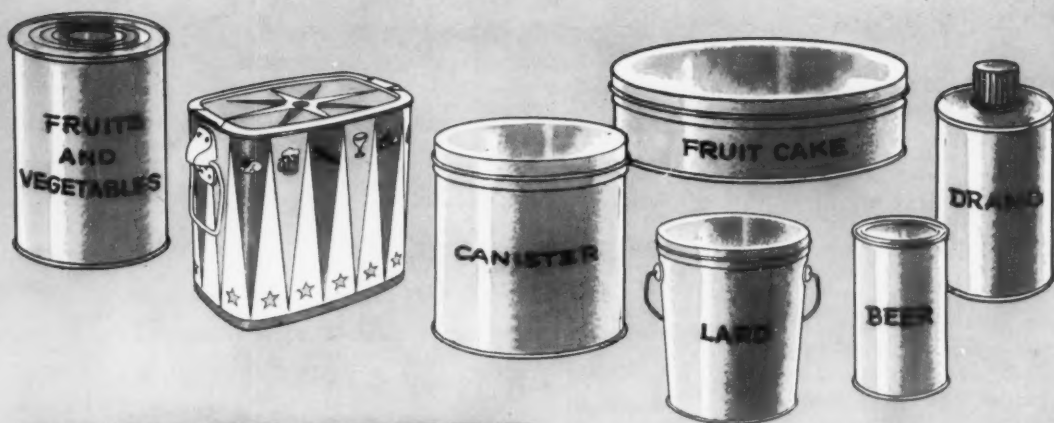
Here's the widest variety of stock flexible vials obtainable anywhere. Available threaded or shell from  $\frac{5}{16}$ " to  $2\frac{1}{2}$ " diameter in any length. These attractive competitively priced containers provide "custom packaging" at low cost. Plastic plug caps in a wide variety of colors and metallic closures available from stock. Cylindrical or rectangular sleeves can be run to specification from basic stock. At Celluplastic your extrusion problems end—whether you need lollipop sticks or are packaging anything from pills to delicate instruments.



• 24 Commerce St., Newark 2, N. J.

VISIT OUR BOOTH... No. 1217  
National Packaging Exposition  
April 4-7, 1960 Atlantic City, N.J.





# HEEKIN

produces a complete line of metal containers that are used for thousands of products on the market today.

Through **HEEKIN** personal service many, many users of metal containers have their packaging problems solved every year.

The fact that **HEEKIN** is successful in making metal packages . . . and has been for over a half century . . . is proof positive of the quality of cans and service you will receive.

Let **HEEKIN** help you with your packaging problems. Heekin has the research, know-how and equipment to do the job.



Next time call for  
personal service

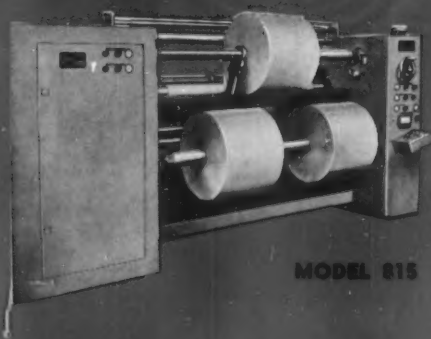
THE HEEKIN CAN CO.



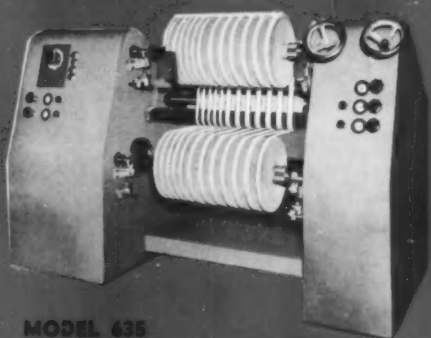
PLANTS IN OHIO, TENNESSEE & ARKANSAS—SALES OFFICES: CINCINNATI, OHIO; SPRINGDALE, ARKANSAS



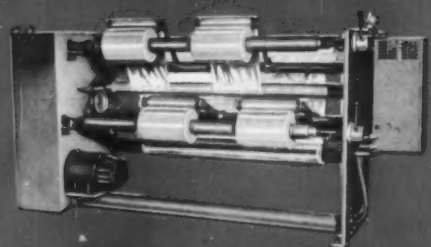
# DUSENBERY HAS THE SLITTER-REWINDER



MODEL 815



MODEL 635



MODEL 810

For complete information  
and technical data  
see us at the  
NAT. PACK. SHOW  
BOOTH NO. 1041  
April 4th thru 7th

- 1 TO MEET YOUR REQUIREMENTS
- 2 TO FIT YOUR PRICE RANGE

With the addition of the new, low-cost Model 810 Slitter-Rewinder to its well-known line, Dusenbery presents a wide range of machines in various models to meet the most exacting individual requirements . . . and to fit your particular price range. All machines employ the differential rewind system which gives smooth, clean-sided, finished rolls from badly wrinkled, off-caliper rolls. One of the machines illustrated is suitable for your purpose.

## MODEL 815 For the converter of paper, tape, all plastic films, foils and laminates.

Designed for high speeds, the extremely versatile Model 815 handles both light, stretchy films and heavy paper with equal facility. Supplied for shear, razor blade and/or score cut slitting. Air operated unwind and rewind tension controls.

### SPECIFICATIONS

- Width—through 72"
- Minimum Slit Width— $\frac{3}{16}$ "
- Web Speeds—to 1,500 FPM. (Depends on slit widths, material and drive).
- Rewinds available from 3" I.D. cores and up.
- Rewind Diameter—24" with or without individual lay-on rolls for each slit width.

## MODEL 635 For the converter of plastic films, laminated foil, tape, glass cloth and paper.

The versatile Model 635 can be supplied for shear, razor, rotary burst or score cut slitting. Air operated unwind and rewind tension controls.

### SPECIFICATIONS

- Width—through 62"
- Rewinds available for 1" through 6" I.D. Cores
- Minimum Slit Width— $\frac{1}{4}$ "
- Web Speeds—to 600 FPM. (Depends on slit widths, material and drive).
- Rewind—13½" through 24" diameter.

## MODEL 810 For the converter of cellophane, acetate, butyrate, mylar, nylon, polyethylene, polystyrene, teflon and triacetate films.

New, compact, low cost razor blade Slitter-Rewinder. The rewind diameter and slit width capacity of the Model 810 is equal to that of many larger machines. Manually operated . . . no air required.

### SPECIFICATIONS

- Maximum Web Width—62"
- Maximum Rewind Dia.—18"
- Maximum Unwind Dia.—24"
- Maximum Speed—200 FPM
- Rewind—3" I.D. Cores
- Drive—2 HP electronic variable speed
- Power Requirements—220 Volt 60 cycle single phase
- Unwind Shaft—1 15/16" diameter for 3" I.D. Cores.

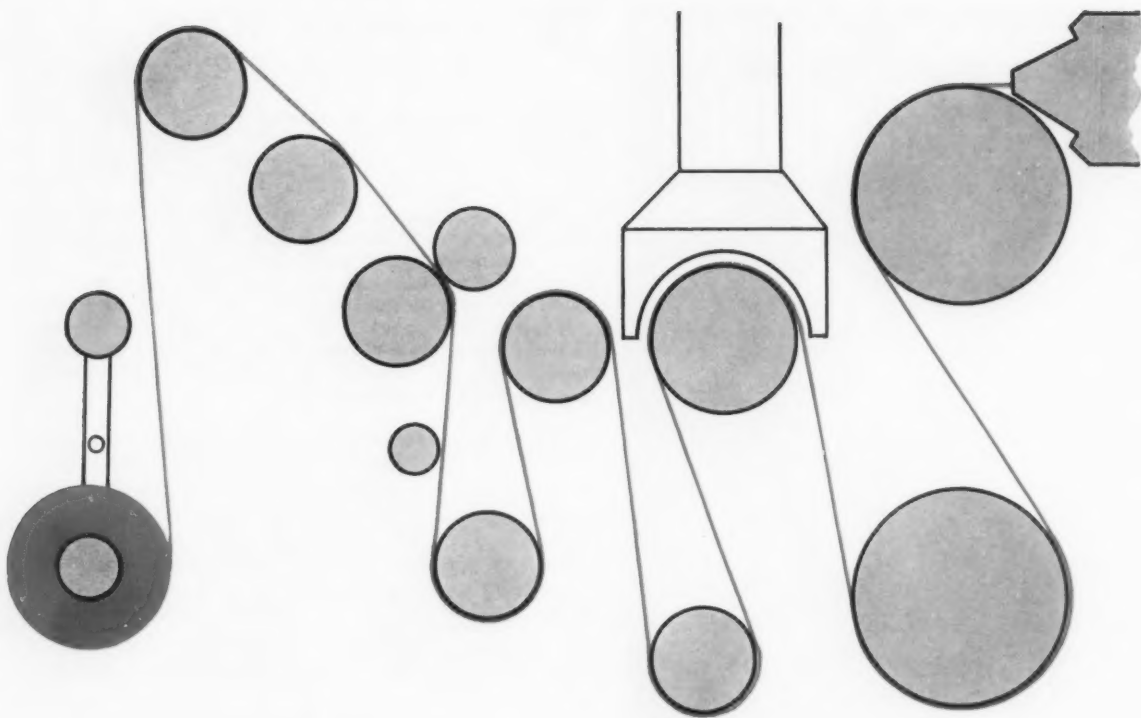
JOHN DUSENBERY CO., INC.,

275 GROVE AVE., VERONA, N. J.

*Dusenbery*

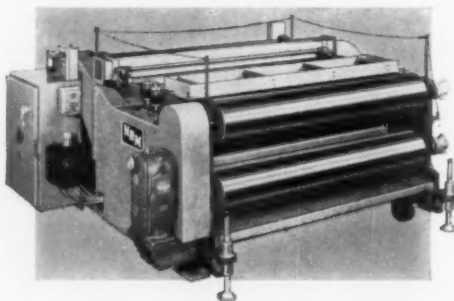
ENGINEERED  
CONVERTING  
EQUIPMENT





## NRM FILM CASTING UNIT

*...for operation at speeds up to 500 fpm*



NRM's film casting unit is offered for production of standard film widths from 36 to 72 in. — wider upon request. Features include turret-type wind-up with constant tension wind-up control, automatic hot knife cut-off and transfer, variable width knife slitting and an integral trim collector ducted for connection to collector or granulator. The unit can be track or floor mounted.

Based on an extensive survey of the industry's needs, NRM's new unit is designed for high speed, efficient casting of 0.0005 to 0.010 in. conventional or linear polyethylene, polypropylene or nylon film. Suitable for installation of a built-in electronic treating device, the machine can produce high-clarity film, ready to print without reprocessing.

Rolls are spiral baffle liquid-chilled, chrome plated and highly polished for production of blemish-free film. Dynamic balancing of all rolls assures vibration-free, true running at highest processing speeds. And, all idler rolls are drilled for optional liquid cooling.

Controls are self-contained, located on the turret end and one side of the machine, within easy reach of the operator. The unit is low and accessible to facilitate thread-up . . . height is adjustable to permit its use with various extruders.

*Find out how this new unit can improve the quality and quantity of your cast film production. Call, wire or write NRM today for application engineering recommendations.*

2184-A

# NRM

RUBBER AND PLASTICS  
PROCESSING EQUIPMENT

## NATIONAL RUBBER MACHINERY COMPANY

General Offices: 47 WEST EXCHANGE ST. • AKRON 8, OHIO



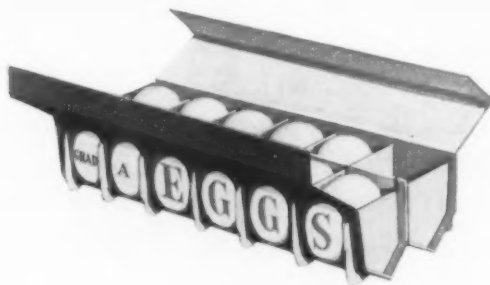
## *Planned Packaging moves merchandise*

### *Ever play catch with an egg?*

If you have, you'll appreciate the terrific protection job egg cartons perform. And they're marvels of packaging ingenuity, too! Just one quick pull on the flaps of this new Form-Fast carton and it snaps open, exposing seven partitions locked in place, ready to cradle a dozen eggs. A simple push closes and locks it again. Resultant filling line savings greatly reduced costs last year in the egg industry . . . helped hold down your family food budget, too!

Creative, cost-saving carton design is but one of countless ways in which Packaging Corporation of America's concept of Planned Packaging, implemented through integrated national facilities, produces better packaging . . . more sales.

Whether your requirements are large or small, regional or national, we welcome the opportunity to help you.



## *Packaging Corporation of America*

Administrative Offices: Grand Rapids, Michigan; Quincy, Illinois; Rittman, Ohio

*Cartons • Containers • Displays • Egg Packaging Products • Molded Pulp Products • Paperboards*





if we have  
a specialty...



...it's volume  
production

It's true that H & D has a reputation for solving thorny packaging problems with imaginative box design. But our real forte is *volume production of regular slotted corrugated boxes*—the kind you probably use to ship your product. In fact, H & D's annual output includes about 225,000,000 of these economical containers. Can you make use of this *specialty* for *volume*?

**Hinde & Dauch Division**



**West Virginia  
Pulp and Paper**

HINDE & DAUCH DIVISION, WEST VIRGINIA PULP AND PAPER, SANDUSKY, OHIO • 17 PLANTS • 42 SALES OFFICES



# Sounding Board

## WE ASK THE READERS

### *Is packaging-machine development keeping up with package-materials development?*



**F. W. Schreiber**  
Chief, Package Development  
Lever Bros. Co.  
Edgewater, N. J.

In my opinion, machine development in the majority of instances keeps pace with the advent of new packaging materials. This is not to say that high-speed converting equipment is available the day after a new polymer emerges from the test tubes of a supplier. How well I know that those of us who are looking for new or improved packages wish this were true.

But looking at the matter on a realistic basis, the best that can be hoped for is to keep the time gap at a minimum. Obviously, this means close liaison among materials producer, machinery manufacturer and packager as exemplified by the activities of such organizations as the Technical Committees of The Packaging Institute, the Packaging Machinery Mfrs. Institute, etc.

The packager has two choices: (1) sit back and wait for the development work to be completed—which in the labile packaging industry never reaches a point and stops—or (2) roll up his sleeves and work with the materials and machinery people in the pioneering phases. While the latter approach consumes time and money, since generally it is a joint educational process, there appears to be no substitute.

Lessening the time gap mentioned previously entails continuing determined team efforts, with all parties concerned brought into the development program as early as possible. The chief stumbling block in the past often has been the aura of secrecy that has permeated the research atmosphere; this can be dissipated only by establishing honest and frank rapport between the interested parties, with no one shifting his responsibility to the other two interested parties.

**Robert W. Clark, Jr., Plant Manager, Pacquin, Inc., Parsippany, N. J.:** In my opinion, the greatest change in packaging materials in recent years has to do with the development of plastics. These plastics are used in bottles and in collapsible tubes. In both cases, packaging-machine development followed the introduction of the new packaging materials.

Our problem has been to adapt our present equip-

ment—which is set up to handle glass containers in the case of bottles and metal containers in the case of tubes—to the use of plastics. We have found that the development of the packaging machines has been influenced by two factors: public appeal and cost.

Public appeal might be classified as (1) how consumers will take to the new package and whether it is just a "flash-in-the-pan," or (2) whether it is something that is going to continue to develop and increase in use as the development takes place.

We have found that most large package-machine companies are conservative and are leaving it up to the small package-machine manufacturers to develop the necessary machines, hoping in the end to gain part of the new market. However, the cost of this development is tremendous and should be the responsibility of the large manufacturer.

Some enterprising individuals, however, can gather the resources to come out with new machines especially built to handle the new packaging materials. Quite often they get ahead of the more conservative, larger manufacturers. This is particularly true in the case of such collapsible-tube equipment manufacturers as the A & M Tool & Die Co.'s Saga Packaging Machinery Div. and The Carbert Mfg. Co., who have gone ahead with the design of machines to handle plastic tubes and have surpassed many larger companies.

The larger companies are now just beginning to make these machines either by acquiring some of the small companies or by developing their own ideas.

We have found that a tremendous amount of development work on our own has been necessary to keep up with the package-materials development. Our working with machine manufacturers has helped considerably.



**Irwin Salins**  
Project Engineer  
Schering Corp.  
Union, N. J.

The packaging-machine industry has succeeded in providing its pharmaceutical customers with efficient machinery for handling the customary glass containers, even small-size bottles and vials. But the introduction and rapid acceptance of [Continued on page 301]



# REWARD!

At the National Packaging Exposition in Atlantic City, April 4-7, 1960—get the biggest reward of your packaging life at Booth 1131—1135. See how a remarkable, new Chase Bag Company product promises to revolutionize the packaging of many chemicals, foods, fertilizers and other products. It offers hard-to-believe shipping economies, plus never-before protection for scores of “problem” products. Be sure to see it—and take a good look, too, at the many examples of custom-made Chase packaging for everything from soft goods to cement...plastic, paper, textile, open-mesh and laminated bags and wrapping materials.

You'll find real excitement at the Chase Exhibit!

**CHASE** BAG COMPANY

355 Lexington Avenue, New York 17, N. Y.

Booth 1131-1135, the National Packaging Exposition, Atlantic City, April 4-7



# U.S.I. POLYETHYLENE NEWS

A series for plastics and packaging executives by the makers of PETROTHENE® polyethylene resins

FEBRUARY, 1960

U. S. Industrial Chemicals Co., Division of National Distillers and Chemical Corporation

99 Park Ave., N. Y. 16, N. Y.

## Packaging Notes

**Skin suspension packaging** with polyethylene film is being used with great success for shipping pottery and ceramic products.

The packages consist of a low density polyethylene skin suspension on a polyethylene-coated corrugated board. The coated board is perforated to allow a vacuum to be drawn through it. Then, products are placed on the board and 6-10 mil polyethylene film is heated, vacuum formed around the products, and heat sealed to the board. The completed unit is packaged in a corrugated container for shipment.

This packaging technique has cut gross shipping weight by 40%, and in-transit breakage has been reduced by more than 60%.

### Now... polyethylene packaging for people!

A rectangular-shaped tent of polyethylene film is currently being marketed for use at football games and other outdoor sporting events.

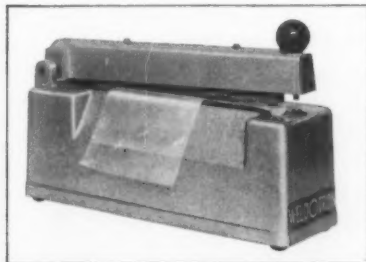
The tent is opaque except for a clear polyethylene viewing window. The tent keeps heat in—rain and snow out.



**Polyethylene film packaging** for carbon-steel tubes has proved to be economical for a New Jersey refinery.

Polyethylene film is wrapped around a cluster of tubes and taped securely closed. Wrapping with polyethylene in this way protects the tubes from rust and corrosion during storage.

Another advantage: packaging cost is said to be one-eighth that of the military-style moth balling the company formerly used.



**A polyethylene bag sealer** for small lots and laboratory use is now being marketed by a New Jersey Company.

The new compact polyethylene heat sealer is only 4 inches wide and 12½ inches long. It is portable and may be plugged into a standard 110 to 120 A-C outlet. The sealer will produce seals up to eight inches long. Sealing time is one-half to two seconds, according to the thickness of the film.

## Improved Film-Clarity Meter Designed by U.S.I. Chemist

New Instrument Eliminates Human Error in Testing Clarity

A research chemist at U.S.I. has designed in conjunction with A.S.T.M. a new light transmittance meter which eliminates human error in testing clarity of polyethylene film. The instrument determines the relative



This new low-angle light transmittance meter was developed at the Polymer Service Laboratories of U. S. I.

amount of light transmitted through any film specimen at essentially a zero angle of scatter.

The new meter is designed to replace the optical bench test... a method which depended on the operator's eye-sight. With the new meter, test results are recorded automatically, without relying on the judgment of the operator.

### Operation of the Meter

Basically, the meter consists of a light source which is concentrated through a sample of film onto a light-sensitive cell. The cell is attached to a galvanometer which measures the amount of light passing through the sample to be analyzed.

Swatches of polyethylene film 1.5 mils thick were used as standard gauge samples by U.S.I. Care was used in handling the samples, since fingerprints on the film could cause variations as much as 10% in light transmittance.

Meters of this type are currently being evaluated by other laboratories in an A.S.T.M. round robin test.

## New Polyethylene Packager Cuts Labor Costs by 50%

A west coast manufacturer recently announced a low-cost packaging machine which fills, closes and produces a finished bag in a single operation. It is designed to use bulk rolls of polyethylene film, and packages items which range in size from pencils to shirts.

The machine is said to cut packaging labor costs up to 50% through speed and efficiency of operation. The unit eliminates time-consuming hand loading of pre-manufactured bags. It reportedly eliminates set-up time, since no adjustment is necessary when changing from large to small size bags.

It is also reported that the machine can be operated by personnel who have no previous training or experience in packaging.

## Now... Disposable Boots of Clear Polyethylene!

Low in cost, but high in protection are features claimed for newly introduced clear polyethylene boots. These disposable boots are easily pulled over regular shoes, and can be worn open at the top or closed with a rubber band.

Uses suggested for these inexpensive boots include biological and atomic laboratories where control of contaminated elements is vital.

The manufacturer currently packages his product in rolls of 50 and 100, and says average cost is less than 14¢ per pair. The boots are watertight, and last for several hours before wearing through, it is claimed.

## Polyethylene Pipe Solves Difficult Tamping Job

Polyethylene pipe has been put to an interesting use in blasting operations for a new Potomac River water treatment plant near Washington, D. C.

A total of 62 holes were drilled to prepare a 110 ft. high cliff for blasting. Fourteen of these holes were from 35 to 96 feet deep and drilled at an angle of 32°. Since the density of the rock formation varied, there was a chance that the bore holes would swing out of line by several feet. Of major concern was the problem of loading and tamping blasting charges to the required depth in the crooked holes. Conventional, non-flexible, metal rods quite obviously would not do the job.

The blasting contractor solved the problem by using 1½" intermediate density hollow polyethylene water pipe. The highly flexible polyethylene tamping "pole" was made up of several sections of pipe.

It easily took the bends in the holes and was used successfully to tamp all required blasting caps and powdered charges in place.

**DO YOU HAVE** a new polyethylene packaging development you'd like the industry to know about? Make it routine to send your information on new developments to U.S.I. POLYETHYLENE NEWS.

Address the Editor,  
U.S.I. POLYETHYLENE NEWS, U. S. Industrial  
Chemicals Co., Division of National Distillers and  
Chemical Corp., 99 Park Avenue, New York 16, N. Y.



2-mil cast polyethylene film made from PETROTHENE 239-27 resin has unprecedented clarity and gloss.

## CAST PETROTHENE®

POLYETHYLENE

new...  
clear  
inexpensive

### CAST POLY FILM PACKAGES IT BETTER...FOR LESS!

In a single year, cast polyethylene film has become a major packaging material. Frozen food, produce, bread, hosiery, sheets, towels, paper plates...even tortillas and tamales are now packaged in clear, tough cast poly film. Here's why cast film offers you a better packaging material for your money:

**CRYSTAL CLARITY**—Cast poly film has an appearance equal to or better than that of other commonly used transparent packaging films. What's more, it has a soft, natural flexibility that adds a look of quality to packaged goods.

**SUPERIOR PACKAGING PROPERTIES**—Cast film has good impact and tear strength, high grease resistance and is an excellent moisture barrier. It heat seals well and is easily printed. Cast film handles well in overwrap machinery designed for conventional polyethylene film.

**ECONOMY**—You pay less for cast film than for other highly transparent packaging materials—whether you figure costs per pound or per unit area of film. It is the most inexpensive high-clarity overwrap material you can buy.

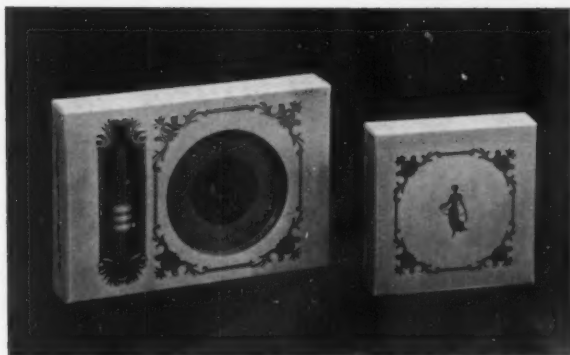
Cast polyethylene film is made by a special process employing U.S.I. PETROTHENE® resins. Production of cast film by extruders has expanded rapidly since the process was introduced by U.S.I. last year. Facilities are now available to meet rapidly growing demand. Ask your film supplier about the special advantages of cast film for your packaging needs.



**INDUSTRIAL CHEMICALS CO.**

Division of National Distillers and Chemical Corporation  
99 Park Avenue, New York 16, N. Y.  
Branches in principal cities





Designed by Richard Jones, art director of Helena Rubinstein, the Compact and Lipstick folding carton and Compact carton were printed in pink on shiny gold foil board and embossed on the presses of the House of Harley.

### The Harley Story\*

## Harley becomes the best



Take a good pressman, give him perfect plates, buy the best papers, foils or board available, and let him work on the most up-to-date machinery possible, and what have you? Possibly nothing. For while you may have the ingredients for a masterpiece, without a dedication to quality you produce mediocrity.

January 1958 marked the tenth anniversary of the House of Harley. It also marked the start of the House of Harley Printing Co., located at 34 Hubert St., New York City.

The previous ten years of "farming out" all manufacturing and printing had given the Harleys a valuable insight into package manufacturing techniques. They realized improvements could be made in bronzing, embossing and printing of foil and other materials, and now they had the opportunity to put their own ideas into practice.

Harley "became the best" because they dedicated themselves to quality . . . a quality that can be reached only through careful and consistent attention to detail. On the mechanical drawing, every detail of design is checked through a magnifying glass. Absolute sharpness is required and all details are retouched until the proper result is obtained. No compromises are tolerated.

The Harleys maintain their own photo equipment to prepare negatives for platemaking. Again, each negative is scrutinized and all imperfections are corrected. After the plates are made, they are carefully inspected and again any necessary corrections are made.

The job is now ready for proofing. Again the results are



Two attractive new presentations of Elizabeth Arden's creams which were produced in the plant of the House of Harley Printing Company. These are the Eight Hour Cream lithographed in pink, red, and gold and Sleek in beige and brown.



Eric de Kolb designed this new Coty Men's Cologne folding carton. It was produced on the presses of the House of Harley in one color black on Kromekote stock, and embossed.

checked and if not completely satisfactory, the plates are made over. Once the plates are deemed perfect, experts step in and devote endless hours to proper positioning and make-ready.

From its top plant superintendent to its most modest pressmen, The House of Harley Printing Company is favored with conscientious and seasoned craftsmen who have played a big part in developing the many unique "house-made" devices and special formulas in inks, powders and sizings that enable Harley to produce incomparable packages.

The House of Harley uses both American and foreign made presses for printing on regular papers, boards and metallic papers. And in addition, their equipment for bronzing and flat and cylinder embossing is the finest available.

Although the majority of their presses are geared for high speed and fast production, the Harley operation runs its presses at extremely slow speeds. Sheets are pulled for inspection at very frequent intervals, and extra wash-ups and improvements in make-ready remedy even the slightest defect.

Color standards are continuously watched. When the job is completed, a final inspection is made and the package is ready to be filled, and join the army of effective silent salesmen on the counter.

There can be little doubt that the House of Harley's operation is unique in many ways, and it's gratifying to know that every day more and more companies adhere to the belief that the quality of design and manufacture of a package are prime factors in boosting the sale of merchandise. It is at the decisive split second of the sale that the package becomes the final persuader. Thus, to sacrifice quality in an effort to save two or three cents on a package might well mean the loss of a two or three dollar sale. And the loss would be to the better, more attractive package.

If you feel you are ready to walk down the path of success through more beautiful packaging, then please contact the company known as "designers and manufacturers of the world's most beautiful packaging" . . . The House of Harley, Inc., 15 East 40th Street, New York 16, N.Y. Murray Hill 6-2984. Cable Address—Harleyart, New York.

\*This is part three of the Harley Story. The first two parts appeared in the January (page 127) and February (page 63) issues of Modern Packaging. Reprints available for the asking.



Shown here are a set-up box and two folding boxes of the Revlon-designed prestige line, Ultima, which is printed in two colors, gold bronzed and embossed on Kromekote board and paper on the presses of the House of Harley.

(ADVERTISEMENT)

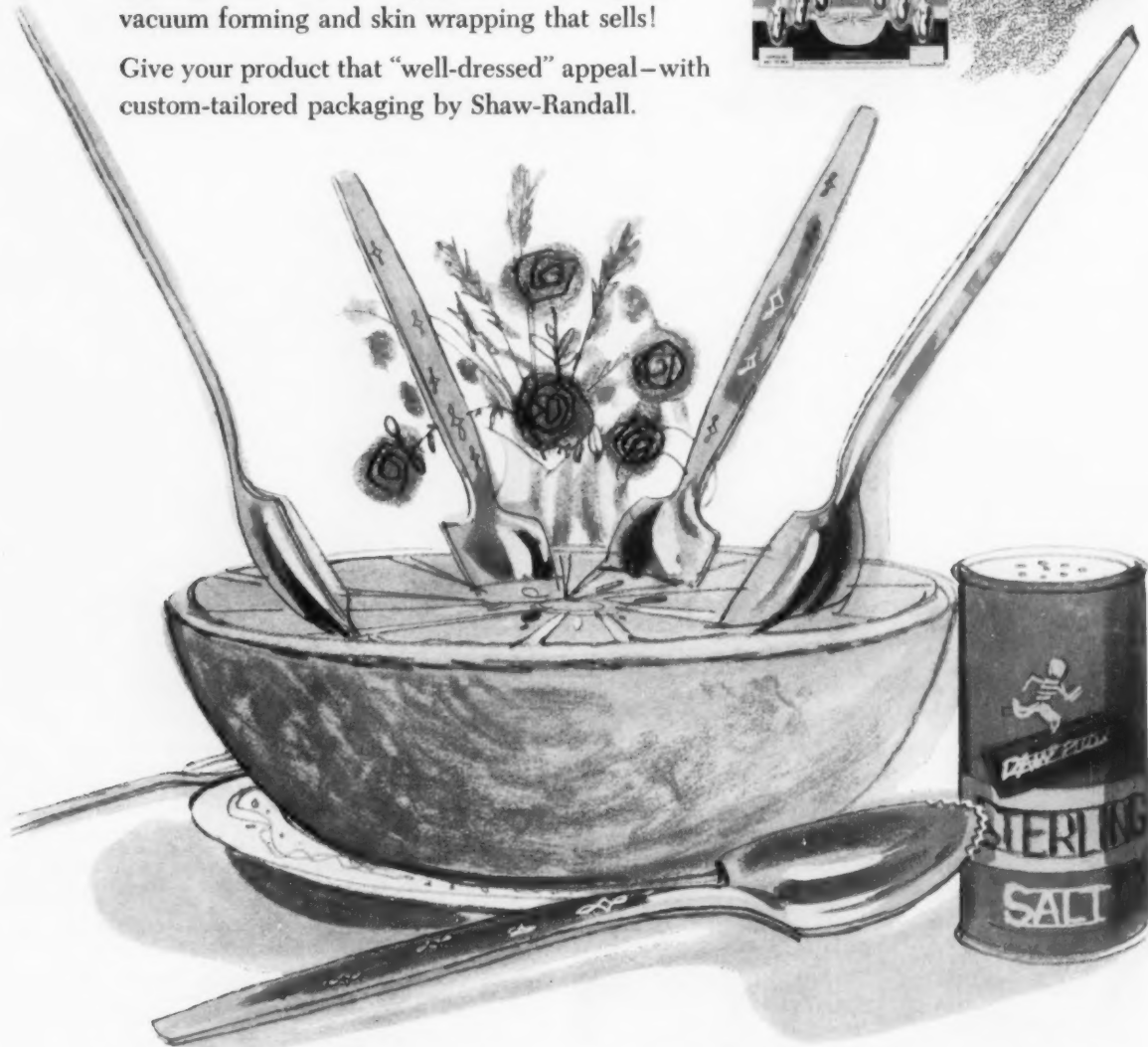


# Product And Premium Strike Home

## ...WITH SHAW-RANDALL PACKAGING

Sterling Salt Company and International Silver Company know how to make merchandise move at point of purchase in the highly competitive supermarket field. Shaw-Randall custom packaging means you simply give us the product. We create the packaging idea, produce and print the artwork, manufacture the package and enclose your product. From hair brushes to shoe laces Shaw-Randall has developed blister packaging, vacuum forming and skin wrapping that sells!

Give your product that "well-dressed" appeal—with custom-tailored packaging by Shaw-Randall.



SHAW-RANDALL CO., INC. PAWTUCKET, R.I.

*Affiliated with Shaw Paper Box Company*

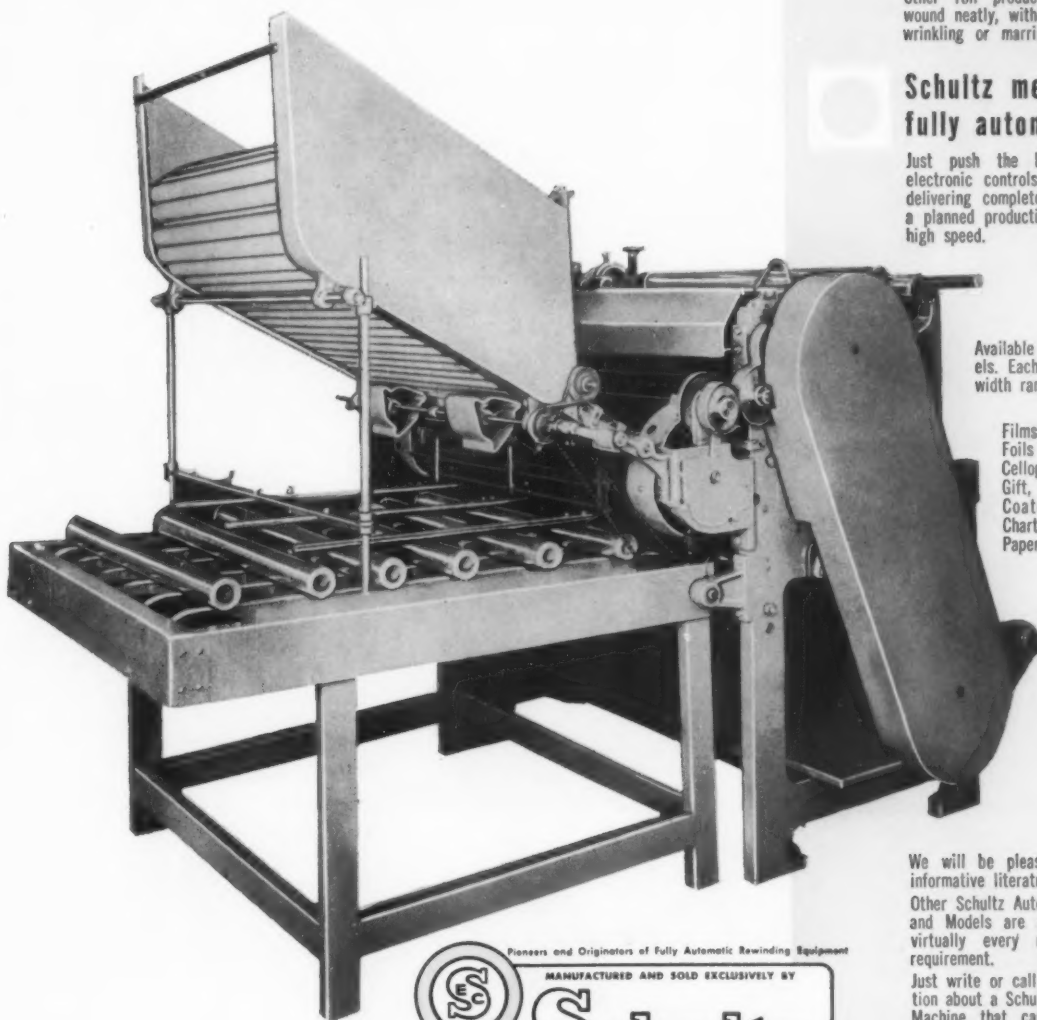
ORIGINATORS OF VACUUM-FORMED CARDED PACKAGING



FULLY  
AUTOMATIC

## PUSH-BUTTON PRODUCTION OF SMALL ROLLS

### with TYPE XP SCHULTZ REWINDING MACHINES



#### Schultz means fully automatic!

Just push the button, and you get continuous production of accurately measured rolls in various lengths and widths.

#### Schultz means fully automatic!

Just push the button, and paper, plastic, foil, cloth or other roll products are re-wound neatly, without tearing, wrinkling or marring.

#### Schultz means fully automatic!

Just push the button, and electronic controls take over, delivering completed rolls, on a planned production basis at high speed.

Available in six models. Each has a web width range of 12".

Films . . .  
Folios . . .  
Cellophanes . . .  
Gift, Shelf,  
Coated, Waxed,  
Chart and other  
Papers

We will be pleased to send informative literature.

Other Schultz Automatic Types and Models are available for virtually every roll winding requirement.

Just write or call for information about a Schultz Rewinding Machine that can help your plant become **fully automatic**! Our technical and advisory services are available to you without obligation. Tell us about your product, your problems and requirements.



Pioneers and Originators of Fully Automatic Rewinding Equipment

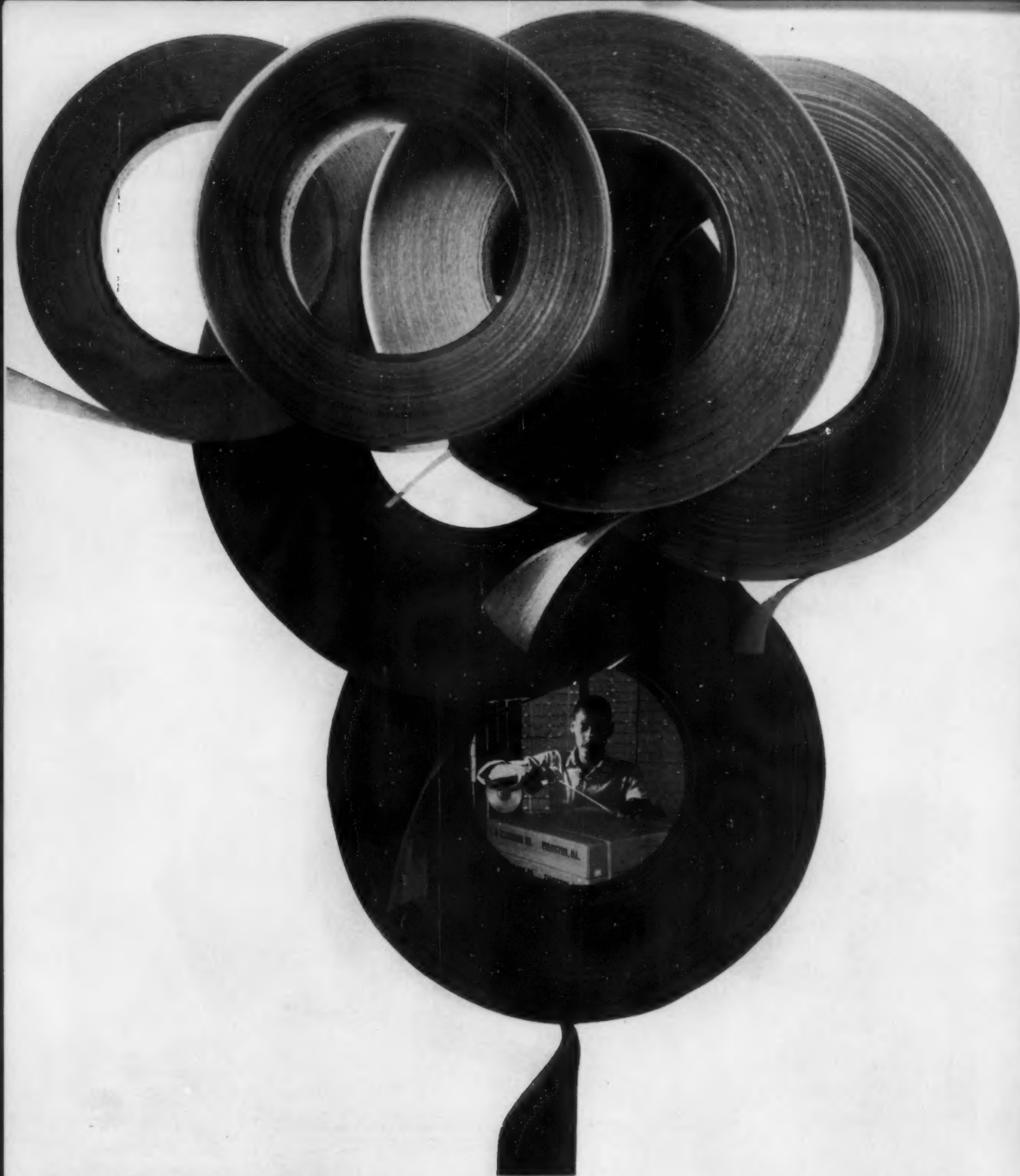
MANUFACTURED AND SOLD EXCLUSIVELY BY

# Schultz

engineering corp.

190 BANKER STREET • BROOKLYN 32, N. Y.  
Evergreen 3-1541





For Heavy Packaging Permacel makes a wide variety of cloth, paper, acetate fibre, strapping and plastic tapes. They combine superior sealing, holding and protecting characteristics for easy, secure packaging in the full range of civilian and military applications.

Tapes for every purpose . . . **PERMACEL**<sup>®</sup>

NEW BRUNSWICK, NEW JERSEY • TAPES • ELECTRICAL INSULATING MATERIALS • ADHESIVES





## Niemand Bros. "Top Hits" Quartet makes new records in tubular paper packaging!

More and more, producers are insisting that the package that brings their product to market offer sales appeal, product protection and economy. As a result, tubular paper packages by Niemand Bros. are proving their practicality more than ever before. These are tried and proved containers — built to protect your product in transit and on

the shelf — designed for the appearance and dispensing convenience that moves your product off the shelf into the buyer's hand.

Our staff of package design consultants is at your service. You can put them to work for you by simply calling your Niemand representative. No obligation, of course.



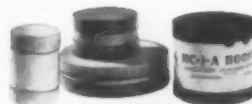
**CUSTOM PACKAGING**  
— for standout individuality



**GOOSENECK CONTAINERS**  
— for efficient, economical  
small unit packaging



**SIFTER TOPS**  
— with "eye-and-use" appeal  
for granular products.



**PAPER CAP CONTAINERS**  
— for the ultimate  
in low cost utility



### NIEMAND BROS., INC.

*Manufacturers of Paper Tube Products*

45-08 Ninety-fourth St., Elmhurst 73, Long Island, N. Y.



# ARPEGE

By LANVIN

This beautiful Arpege package dispenses its famous fragrance in a super-fine, breath-soft mist, produced by the Risdon Micro-Mist\* valve.

## MICRO-MIST\* Valve By

# RISDON

When the Risdon spray dome actuator is pressed, the Micro-Mist's mechanical break-up action combines with the aerosol "boiling" effect to give dual diffusion. The result is a wider, drier, shorter range spray mist, ideal for perfumes and other expensive products. The Risdon valve assures consistent quality performance and longer lasting contents which promote customer satisfaction and brand loyalty.

Other Risdon Micro-Mist advantages for various products include:

- **Improved Product** — Dilution effects can be minimized.
- **Greater Formulation Latitude and Economy.**
- **Improved, Ultra-Low Pressure Applications** — Over a wider range of temperature and pressure.



For further information on the Micro-Mist as well as other Risdon valves and complete containers, send for this new, free "Aerosol Dispensing" booklet.

**THE RISDON MANUFACTURING CO.**  
AEROSOL DIVISION  
NAUGATUCK, CONN.

\*Patented  
\*Reg. Trade Mark

R1-123



ANNOUNCING THE

# Doughboy

SEALING • LABELING • CODING • CONVEYING

## Systems

### Product Packaging Problems

#### FILM

The problems involved in the tremendous growth of film packaging are a constant challenge. New Doughboy systems, new Doughboy machines are successfully, efficiently and economically packaging thousands of products for hundreds of manufacturers. May we help you?

#### PAPER

Packaging with laminates of paper and film present quite different problems which are also being successfully solved by Doughboy. If you have such a problem involving film or paper and film laminates please write.

Do Better  
with



DOUGHBOY INDUSTRIES, INC. • Mechanical Division  
New Richmond, Wisconsin

#### DOUGHBOY INDUSTRIES, INC.

Mechanical Division • New Richmond, Wisconsin U. S. A.

Gentlemen:

We would like information on the packaging of

\_\_\_\_\_ We plan to use \_\_\_\_\_  
(your product) (brand name)

film or \_\_\_\_\_ film laminate.  
(brand name)

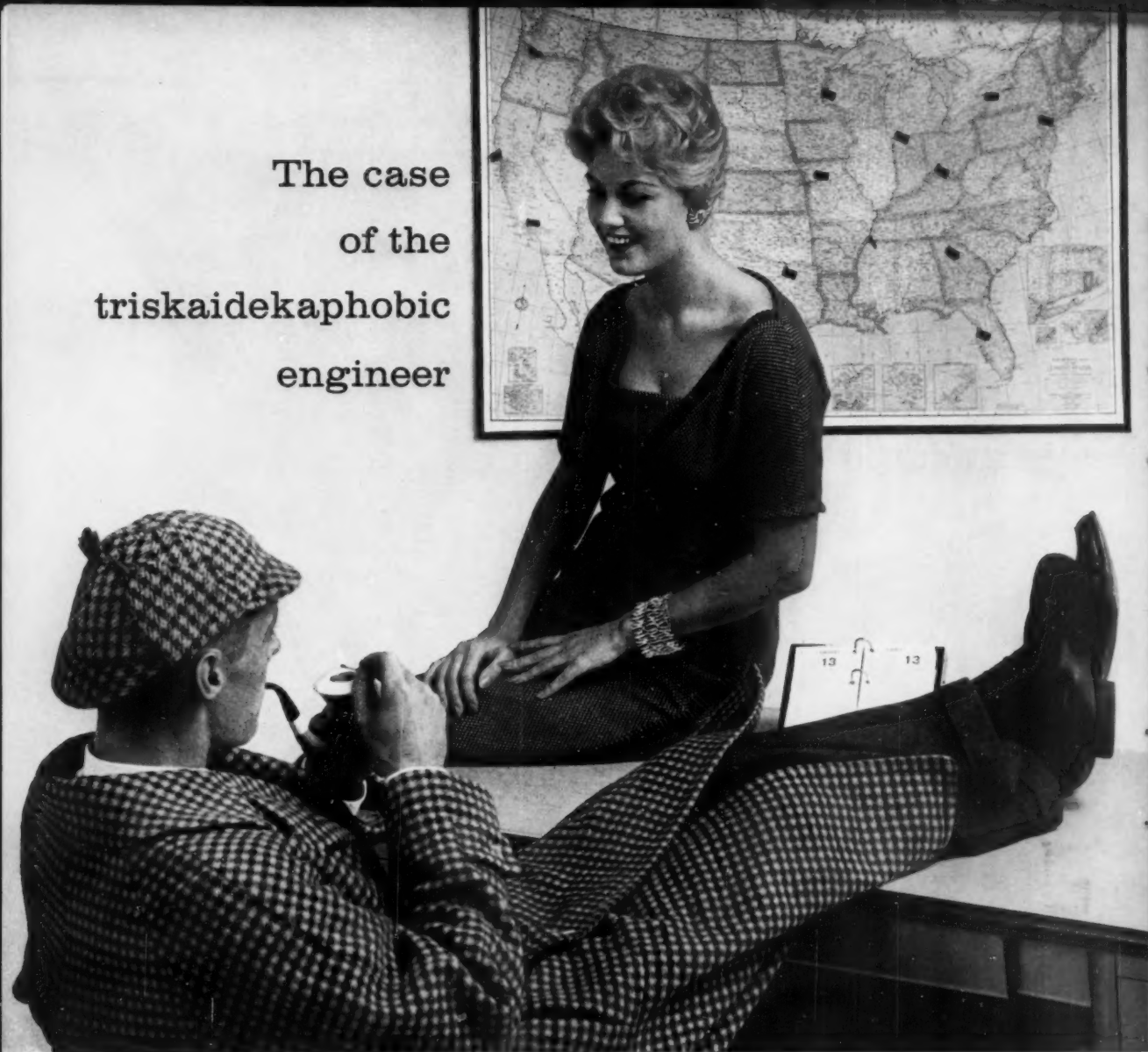
NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_



The case  
of the  
triskaidekaphobic  
engineer



**FEARLESS FULLER:** I finished off a very interesting case over the weekend, Miss Watson.

**MISS WATSON:** Let's hear about it, Fearless.

**FEARLESS FULLER:** It concerns a good prospect who agreed our adhesives were best, our service was best and our price was best. Yet he wouldn't order.

**MISS WATSON:** A baffling mystery.

**FEARLESS FULLER:** Yes, until I discovered the reason for his actions. The man suffers from triskaidekaphobia.

**MISS WATSON:** Sounds like a horrible disease.

**FEARLESS FULLER:** Not in the least. Actually all it means is fear of the number 13. Many people are triskaidekaphobics.

**MISS WATSON:** That must be what my hillbilly cousin was. He refused to sleep 13 in a bed. But what has triskaidekaphobia got to do with us?

**FEARLESS FULLER:** Well, this engineer's been reading our ads and noted that we always list 13 Fuller Plants. And for this reason he refused to order from us.

**MISS WATSON:** How did you solve the case?

**FEARLESS FULLER:** I explained that although we list 13 plants, these are only our main plants. Actually, Fuller has additional locations, 23 to be exact.

**MISS WATSON:** Well, did you sign him up for a big order?

**FEARLESS FULLER:** Naturally.

**MISS WATSON:** Oh, you're wonderful, Fearless!

**FEARLESS FULLER:** Elementary, Miss Watson. There are very few problems a Fuller man can't solve.

*Your Fuller man is ready with the correct solutions on any adhesive problems for you, too. Contact your near by plant.*

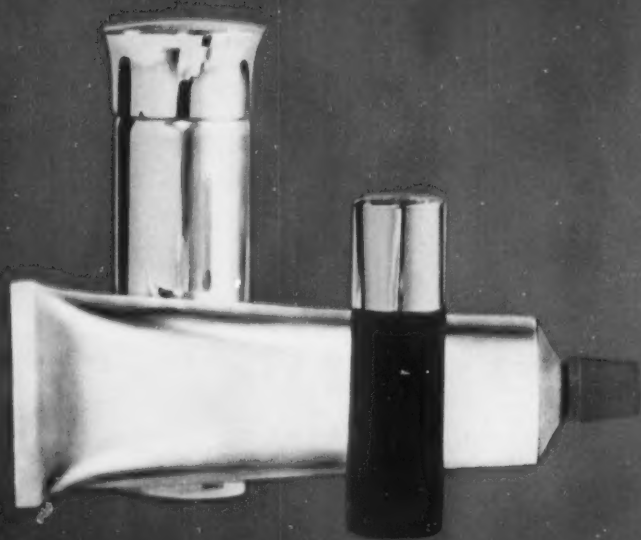
## H. B. Fuller Co.

### INDUSTRIAL ADHESIVES

St. Paul, Minnesota

St. Paul, Minn. • Atlanta, Ga. • Buffalo, N.Y. • Chicago, Ill. • Cincinnati, Ohio  
Dallas, Tex. • Kansas City, Mo. • Linden, N.J. • Los Angeles, Calif. • Memphis,  
Tenn. • Portland, Ore. • So. San Francisco, Calif. • Tampa, Fla.  
Also Winnipeg, Can. • Fuller Adhesives International, Nassau, Bahamas





Women love fine things and are loyal to products that appeal to them. Quality containers for your products pay double dividends both in customer satisfaction and increased sales.

Whether it is a collapsible metal tube or a one-piece aluminum Peerasol\* container Peerless makes the highest quality container obtainable.

Both tubes and Peerasol containers can be handsomely decorated in two, three or four colors over a base coat.

The Peerasol containers offer precise valve-cup fit as a result of a patented manufacturing process. This means leak-proof containers, higher pressures and a high standard of quality control. Write or call for complete information.

## **PEERLESS TUBE COMPANY**

**Bloomfield, New Jersey**

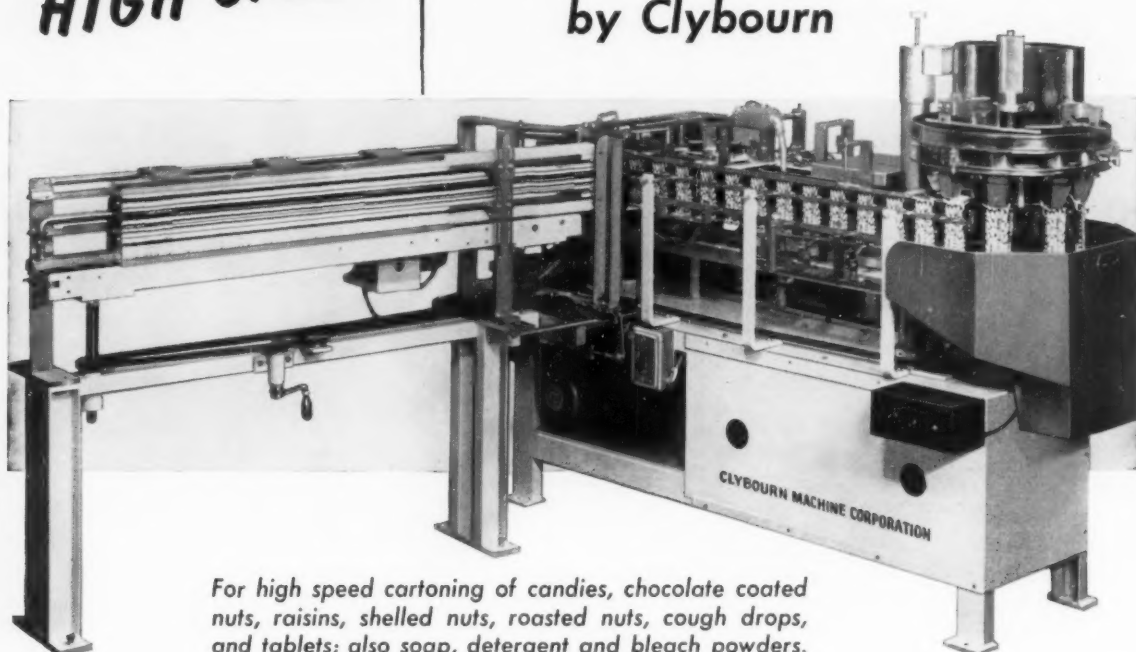
\* Peerasol is a tradename of the Peerless Tube Company





***NEW  
HIGH SPEED***

## CMC Continuous Automatic Carton Filling and Closing Machine by Clybourn



*For high speed cartoning of candies, chocolate coated nuts, raisins, shelled nuts, roasted nuts, cough drops, and tablets; also soap, detergent and bleach powders.*

### **Outstanding features include —**

***Something new  
has been added!***

For years the Clybourn CMC Continuous Automatic Carton Filling and Sealing Machine has stood out—the recognized leader in low cost carton filling and sealing.

Now, in this new CMC Continuous Automatic Cartoning Machine Clybourn gives you added high speed carton opening and positive, high speed filling for new uniformity of content and new low costs in the filling of small tucked or glued cartons.

- **200 cartons per minute**  
On demonstration at 225 cartons per minute the machine opened, filled and closed 16000 cartons without error.
- **Positive filling — no bridging**  
New, high speed filler design with terrific shake-down vibration assures uniform carton content.
- **New, high speed carton opening mechanism**
- **Small floor space requirement — only 6 x 8 feet**
- **Carton sizes to 2½ x ¾ x 5 inches high**
- **Reliability**—that users have learned to expect from the Clybourn CMC Continuous Automatic Carton Filling and Sealing machine.



Send for literature or tell us  
what you want to carton.

**CLYBOURN MACHINE CORPORATION**

**6479 N. Avondale Ave., Chicago 31, Ill.**



*Another FOIL packaging success with ANACONDA ALUMINUM...*



## *ANACONDA ALUMINUM FOIL* keeps Dentyne fresh and flavorful

Making sure that familiar Cinnamon and new Spearmint Dentyne chewing gum reaches customers full-flavored and chewy is important to **American Chicle Company**. To protect a hard-won reputation, they protect their product with **Anaconda Aluminum** foil.

Once Dentyne gum leaves American Chicle's Long Island City, New York, and Rockford, Illinois, plants, its freshness depends on packaging. That's why it's sealed in laminated

aluminum foil—a wrapper that preserves the quality of fast-selling Dentyne beyond all normal shelf-life demands.

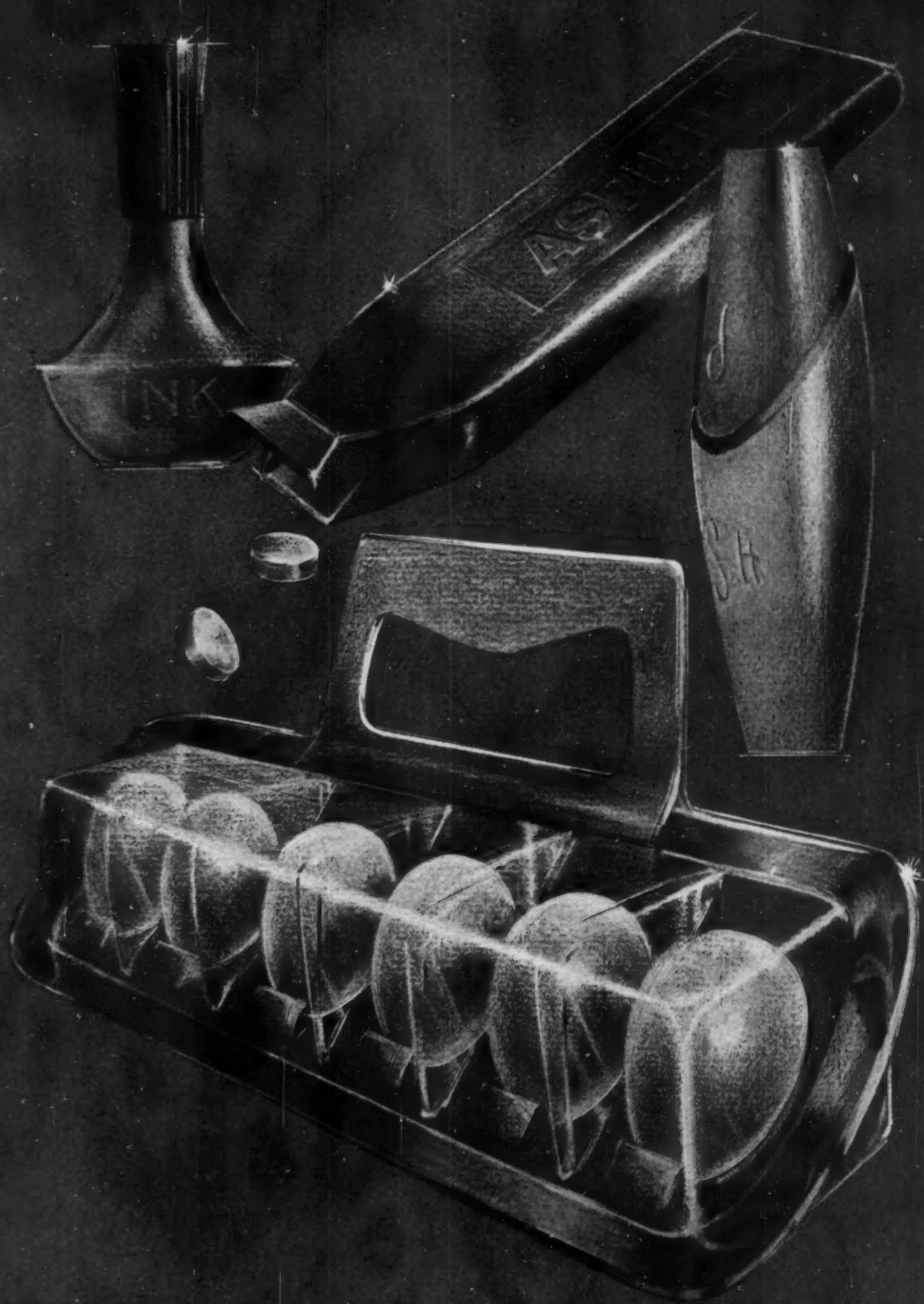
To investigate what foil packaging can do to give your product extra protection and added eye-appeal, contact your nearby Anaconda Aluminum representative. And for information on all our products and facilities, send for our new brochure, "*This is Anaconda Aluminum*". Write Dept. MF-3, Louisville 1, Kentucky.

*When you buy foil for packaging or printing,  
remember... every industry has one member who  
specializes in customer satisfaction*



ANACONDA ALUMINUM COMPANY • GENERAL OFFICES, LOUISVILLE, KENTUCKY







## Wanted: packages with more "Hard Sell"

Many of the most persuasive of tomorrow's packages, like those on the left, will be made of plastics. Many of these will be made by creative package manufacturers of Monsanto plastics — just like the successful packages on the right that are making sales gains in today's competitive markets. Lustrex® styrene plastic, for example, with its sparkling transparency or bright colors in a wide range of strengths, can be precision molded or formed to your exact design specifications. The versatile properties of Monsanto Polyethylene help designers create colorful, lightweight caps, closures and bottles, strong and moisture protective coatings, high clarity film overwraps and bags. Crystal clear Vuepak® cellulose acetate, serves marketers requiring display packaging in window boxes, set-up or folding cartons.

How long has it been since you investigated plastics for your packaging? A special report is now ready to assist you in a current evaluation of plastics and your product's package.

Write for a copy to Monsanto Chemical Company, Plastics Division, Room 733, Springfield 2, Massachusetts.

LUSTREX: Reg. U. S. Pat. Off.



### MONSANTO DEVELOPER IN PLASTICS





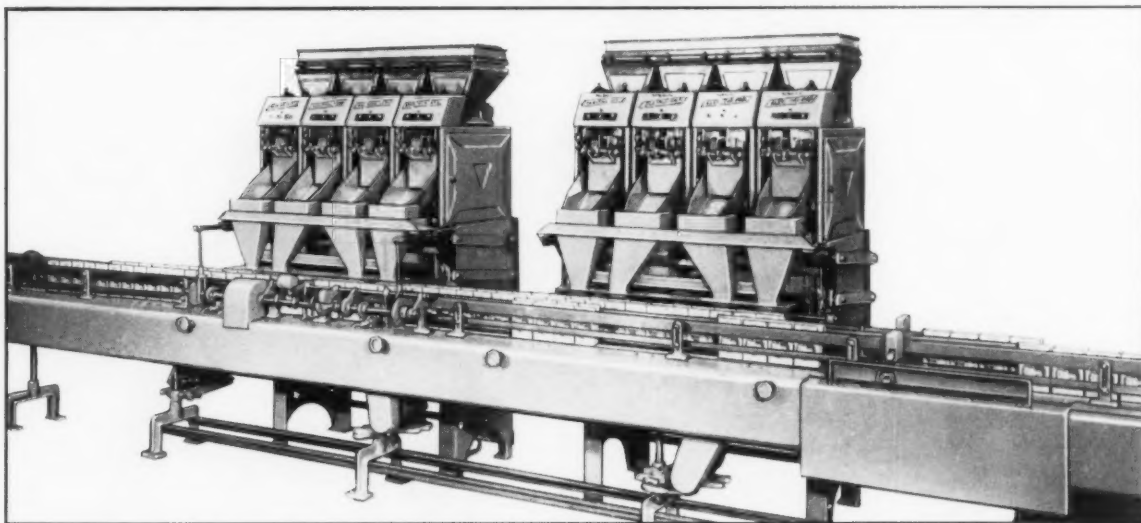
## What Does It Take To Build Automatic Packaging Machinery?

Obviously, the engineering development of any fully automatic packaging installation is a complex matter. Any good engineer can design a custom machine that will do the job one way or another. However, the problems presented by actual production conditions need the simplest, most economical solution. The machine that

best solves the problems is always a combination of proven automatic packaging techniques and experience. In other words, a fitting of perfected methods into your plant operations.

That "fitting" is often the only difference between uneducated iron, and an automatic packaging system that really pays off.

## HOW DO YOU KNOW **WHOSE** AUTOMATIC PACKAGING MACHINE YOU SHOULD HAVE?



Regardless of what form the machine itself takes, the success of its operation in *your* plant depends on two basic factors—the talent and experience of the machine manufacturer to fit your requirements . . . and the proven automatic units that he combines into a machine.

First, let's consider the units or "proven concepts" he has developed in the years of his experience. And, for the sake of example, take the machine shown above that packages a nationally known brand of baby cereal:

The machine must be capable of continuous high speed operation under the toughest plant conditions. It must operate with the least possible attention.

**This Triangle Automatic Machine  
Delivers 120 Packages Per Minute  
And Is Capable Of More . . .**

**Truly Automatic—Week After Week,  
Month After Month And Year After Year.**

The machine must be accurate. It must deliver packages filled to as precisely the right amount as possible.

**This Triangle Automatic Machine  
Uses Elec-Tri-Pack Net Weighing  
Scales That Are Sensitive  
To 1/32 Oz. Or A Single Piece.**

Triangle's 37 years of automatic packaging experience is the other factor in the success of this baby cereal packaging machine.

It has given Triangle the ability to provide any type of feed from floor to overhead for handling dog biscuits or powdered dry milk. Furthermore, the Triangle machines are properly synchronized with other plant processing operations.

Triangle is a specialist in the business of fully automatic packaging machines. Many high volume packagers of a wide variety of products (names on request) depend on Triangle equipment.

The next time you're considering machinery of this type, ask the location of other Triangle installations, and see the facts for yourself.



.....YOU REALLY SAVE WITH.....

**TRIANGLE  
PACKAGE MACHINERY COMPANY**

6634 W. Diversey • Chicago 35, Illinois  
Telephone TUXedo 9-0200



*See us at the Packaging Show*

BOOTH 245

ATLANTIC CITY

APRIL 4th TO 7th

*the  
finest  
in  
packaging*



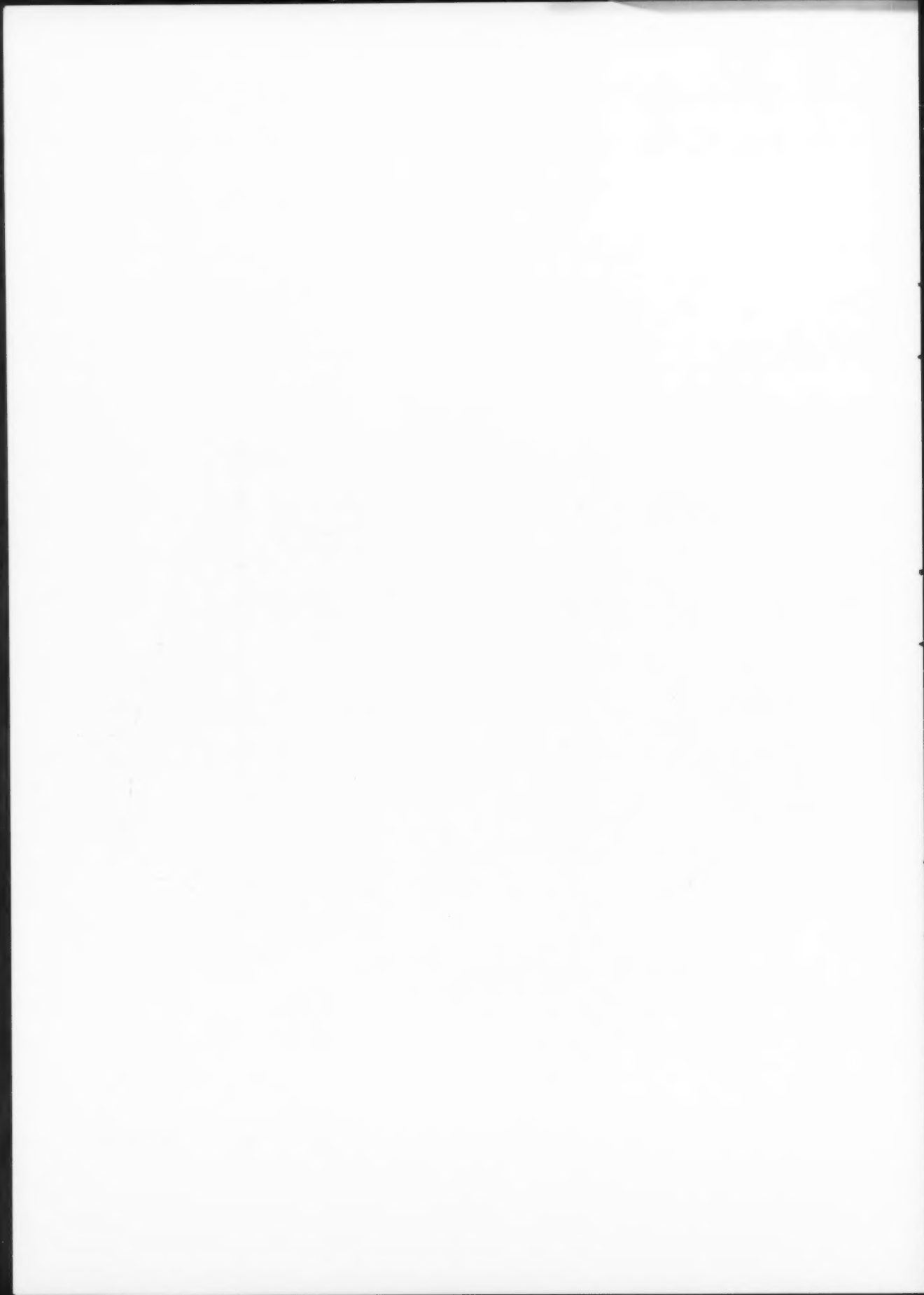
FOLDING CARTONS  
SET-UP BOXES  
LABELS AND WRAPS  
COUNTER DISPLAYS

**THE CHASPEC MANUFACTURING COMPANY, GREENWICH, CONN.**

*Manufacturers of merchandising displays and packages of distinction since 1920*

In its own 40,000 square foot building, Chaspec has assembled an enviable combination of diversified manufacturing processes and skilled personnel. These facilities, together with its creative and technical know-how, enable them to produce an unlimited variety of provocative and sales-stimulating packages and displays.







The FMC Campbell Wrapper wraps 180 packages of soda crackers a minute. The film is CONOLEX® . . . a high-density polyethylene film made of SUPER DYLAN, a Koppers product.

By switching to crisp, transparent over-wrap film made of SUPER DYLAN, you can save up to \$129 for each 1,000 pounds of film you may now be using.

In addition to saving hard cash, you also get a superior package—because the film is unaffected by humidity and temperature (up to 250° F.), because it has superb clarity and printability, and because it tears in a straight line *without tear-tape*.

Write for technical data and a free sample of SUPER DYLAN high-density polyethylene film, and find out what it can do for you.

**It costs less  
to wrap with high-density polyethylene film . . .  
made of SUPER DYLAN®**



CONOLEX, a high-density polyethylene film, is a product of Flexible Packaging Division, Continental Can Company.  
FMC Campbell Wrapper made by Hudson-Sharp Machine Co.



## **KOPPERS PLASTICS**

Offices in Principal Cities • In Canada: Dominion Anilines and Chemicals Ltd., Toronto, Ontario

DYLITE® expandable polystyrene, DYLENE® polystyrene and DYLAN® polyethylene are other fine packaging plastics produced by Koppers Company, Inc.



There is a

# BRADLEY BOX

for You (World's Greatest Selection from Stock)

When it's not in stock, we'll make it fast and right to your "specs." Join the rapidly growing number of "Blue Chip" manufacturers, makers of everything under the sun, who always "Buy Bradley" when they buy re-usable plastic boxes. Bradley specializes in producing the particular box that makes your product sell better because it looks better. You too, will do better when you "Buy Bradley!" Send today for our complete, new catalog and see why!



## BRADLEY

**ASSOCIATES, INC.**  
1650-58 N. Damen Ave.  
Chicago 47, Illinois

OFFICES IN: LOS ANGELES AND NEW YORK CITY

"World's Largest Assortment of Rigid Molded Plastic Boxes from Stock"





bakery items?  
beer?  
cosmetics?  
drugs?  
electronic parts?  
food?  
paper products?  
household supplies?

**cartoning**  
and case packing  
**ideas**  
R. A. JONES & COMPANY, INC. CINCINNATI, OHIO

## new cartoning ideas? check Jones!

### free CARTONING and Case Packing IDEAS:

- \*100 cartoning ideas
- \*20 pages, fully illustrated
- \*28 product categories from "automotive parts" to "tile"
- \*10 different semi- and fully-automatic models illustrated and described.

The colorful new 20-page CARTONING and Case Packing IDEAS brochure — just off the press — is already being warmly welcomed by the packaging industry. It's loaded with new ideas. Shows how new package designs help carry out various merchandising strategies, and how the products are cartoned economically on semi- and fully-automatic machinery.

This exciting new idea book can stimulate your thinking — perhaps help you with your current cartoning project? Write us on your letterhead for your free copy. R. A. Jones & Company, Inc., P. O. Box 485, Cincinnati 1, Ohio.

**R. A. JONES & COMPANY, INC.**  
*Cartoning Machines - Case Packers*

• Branch offices: New York, Chicago, Atlanta, St. Louis, Los Angeles, San Francisco, Seattle, Dallas, Mexico, Montreal.



KING SIZE

KENT

*P. Lorillard's Kent Carton*  
in accordance with the regulations of the Federal Paper Board Company, Inc.



SIZE

KING

KENT

*A Blend of the World's Finest Tobaccos*

Another  
leading product  
that now uses

## Riegel FOLDCOTE

**Full-bleached sulphate board  
machine-coated, one side**

For noticeably brighter, cleaner  
packages...and extra eye-appeal  
...try Riegel's outstanding new  
carton stock...Foldcote™ Superwhite  
for color brilliance, super-smooth  
for high-fidelity reproduction  
...super-strong for a rugged, rigid  
package. Ask for samples  
and full information. Ask too,  
about other solid bleached  
boards tailormade to your needs.

Write to Riegel Paper Corporation,  
260 Madison Ave., New York 16, N.Y.

Federal Paper Board Company, Inc.,  
Carton Division,  
uses Riegel's Foldcote  
for P. Lorillard's Kent Carton.  
Printed in 3-color by  
high-speed rotogravure



# World Report

Abstracts from foreign packaging magazines

A MODERN PACKAGING editorial feature

## ENGLAND

### *Extrusion-blown unplasticized PVC film*

Further advances have been made in Britain in the development of an unplasticized polyvinyl chloride compound designed to produce a clear film by the blown-extrusion process. According to *Packaging Review* (England), cost compares favorably with that of other thermoplastic films used for packaging. The film may be heat sealed by conventional methods and will twist readily to form a simple closure for packaging many types of merchandise. It reportedly has excellent dimensional stability, high tensile strength and very low water-vapor permeability. It also resists the action of strong acids and alkalis at normal temperatures, as well as oils, greases and solvents. It is flame resistant and possesses excellent light stability with good ultra violet resistance. Properly compounded, it is reportedly non-toxic according to standards of the British Plastics Federation. The compound found to be most satisfactory was one stabilized with a barium-cadmium-epoxide system and lubricated solely with a small quantity of stearic acid. The film has little odor and testing to date does not indicate that any taste is imparted to items contained in it. It should have considerable application for packaging clothing and textiles. One difficulty that had to be overcome was that of processing temperatures in relation to the high pressures unplasticized PVC develops in the extruder.

## HOLLAND

### *Captive cap for tubes and squeeze bottles*

What might be the answer to a dispensing captive cap for use on collapsible tubes and polyethylene bottles, covered by Dutch patents, is described in *Packaging* (England). The closure consists of two parts, injection molded. The outer cap or body can be a screw cap or snap-on closure with a molded-on tube portion at the top. In this portion slides a little piston or plunger, the second molded part, of which the shank is partly hollow with an axial channel producing an outlet as soon as this aperture is brought opposite a hole in the tube portion of the cap. The principle of the system allows for two different applications. The cap is designed so that, in the closed position, the piston-like portion projects beyond the tube and must be pushed down to bring the axial holes in tube and plunger opposite each other. This is the type of closure most suitable for collapsible tubes. In the closed position, the plunger is at its lowest position and gives access to the contents only when, by means of an upward stroke, the discharge outlets are brought into conjunction. This execution, supposedly, is suitable for squeeze bottles, because for this purpose the cap requires no manipulation for discharge, opening automatically as soon as pressure is applied to the body of the bottle.

## ENGLAND

### *New copolymer film for food packs*

A new grade of vinyl chloride copolymer film is available for food-packaging applications, according to *Packaging Review* (England). It is reportedly non-toxic and may be used in direct contact with foodstuffs. Packaging applications suggested are for multi-compartmented boxes, frozen-food packs, contoured packages for knives, scissors, tools, spare parts and display packs. The material is said to offer many of the advantages of rigid PVC and has char-

acteristics likely to assure better results by the vacuum-forming method. The film accepts fine detail and printing, can be stretched considerably and shaped to fit the packaged article. It is presently produced in white only, but will eventually be made in colors. A plastic welder is available for applying lids with this material, operating at extra-high frequency, giving flash-free performance.

## FRANCE

### *New deep-drawing technique for thermoplastics*

A French development for extremely deep drawing of plastics—containers 10 times as deep as their diameter—is described in *Packaging* (England). Under normal limitations that apply to vacuum forming of plastics, the article notes, depth should not exceed the width of the shape. This enormously enlarges the scope of the system, it is stated, making ultra-lightweight containers feasible, with corresponding economy of material, yet without excessive reduction of strength. The technique is applicable to the production of throw-away cups, beakers and other package forms, and reportedly can be operated with all types of thermoplastic materials—polyethylene, polyamides, polyvinyls and polyesters. A particular feature of the containers is that the side walls may be drawn to minimum thickness while the base and the rim of the container remain relatively rigid, thus assuring economy of material. The rigid rim allows for effective closing of the containers, whatever their shape. Plastic-lidded ice-cream cups made by this method have been quoted below the price of paper-board cups of the same capacity. The containers, in appropriate shapes, are suggested for peppers and paprikas, celery salt and table salt. They are also suggested for liquids, such as olive oil, Worcestershire-type sauces and flavoring essences. With elongated tips or nozzles they are suggested for lubricating oils and other products requiring to be exactly placed or ejected. The technique also may be applied for production of collapsible tubes. In this case, the rim is made very narrow and is trimmed off so that the base of the tube, after filled, can be flat sealed. Containers up to a litre capacity are possible.

## ENGLAND

### *Heat-and-eat in Britain*

Two food packers—J. Lyons & Co., Ltd., and The Ross Group of Grimsby—have launched cook-in-the-bag packages in England, according to *Packaging Review* (England). Lyons is offering spring stew consisting of diced mutton in a meat sauce garnished with haricot beans, peas and carrots; braised steak and vegetables, and stewed steak and onions. The vacuum packs are comprised of polyethylene-coated cellophane to withstand up to 40 min. in boiling water. The Ross Group of Grimsby is offering frozen kippers in the cook-in bags, ready to eat after a few minutes in boiling water, thereby keeping the kitchen free of fish smells—an advantage that will be appreciated by British housewives.

## GERMANY

### *Simple hand-fed strip packer*

A simple strip packer built in Germany is described in *Packaging News* (England). It consists of an open-top hopper whence items to be packaged are moved by hand through a channel and inserted individually into recesses shaped to receive them on a small turntable. As this rotates,



## World Report [Continued]

each recess or pair of recesses in turn is brought into alignment with a chute which is synchronized to deliver the items between twin webs of the selected packaging material, just as these pass between a pair of small crimp rolls. The machine is said to operate satisfactorily with a variety of heat-sealing films. The machine delivers a continuous strip of unit packs or may be equipped with perforating knives to separate individual units or sets of units. One operator can package 1,200 suppositories or 2,500 tablets an hour. The machine can be changed quickly from one product to another by replacing turntable and crimp rolls which slide into place without use of tools.

### ENGLAND

#### *Rigid boxes made with self-seal blanks*

A further step toward eliminating storage and handling problems of rigid boxes is suggested by a machine for rapid erection of boxes and lids from folding boxboard blanks stencil coated with a self-seal adhesive. According to *Packaging News* (England), rigidity of the boxes made by this method is such that a shoe box of this type can support the weight of a man. Thus the boxes are recommended for tools and other heavy metal articles and for delicate goods which give no support to the package yet must be stacked high. Contributing to the strength of the box is a new web infold at each corner, introduced to assure accurate assembly by hand or machine and to provide a reinforced siftproof corner with no tendency to bowing under pressure. The boxes may be made in a variety of styles and covered with fancy papers, foil or acetate laminated for high-gloss effect. The machines are available on a rental basis to users of the boxes. Production speeds are about 1,200 to 3,000 lids or boxes per hour and the machine can be operated by unskilled workers with a little practice.

### FRANCE

#### *New kraft-veneer for drums and weatherproof cases*

A lamination comprised of veneer, backed on both sides with a high-grade, impermeable kraft paper of 200 gms. per square meter on the French market is suggested as suitable for making waterproof cases and for drum manufacture. According to *Emballages* (France), the material at minimum wall thickness has the same mechanical strength as conventional grades of plywood used in the packaging field. Other features: specific gravity 15% less than that of plywood of the same mechanical strength; moisture resistant and water repellent because (1) the bonding medium is not sensitive to water and (2) the layers of kraft prevent water penetration. The surface finish of these new cases allows for quality printing and coloring.

### FRANCE

#### *Inflatable polyamide-film cushion pack*

A new idea in inflatable cushion packs developed in France for the shipment of bananas is suggested in *Packaging* (England) as having possibilities for low-cost transit protection of refrigerators, appliances, furniture, instruments and other heavy goods. It consists of a number of inflated lengths of extruded polyamide film tubing laid in a row on a polyethylene film sheet and attached to the sheet loosely, bandoleer fashion, by means of polyethylene strips. The "mattresses" so formed are shipped flat and inflated when required for use. Inflation is accomplished by an air valve made from an inserted strip of narrow lay-flat polyamide tubing. A special flat nozzle, attached to a small compressor, is inserted into the valve-like portion and the air pressure within the cellule builds up to a point where

the pressure closes the valve automatically. Inflation of the "mattresses" for bananas reportedly takes about a minute. The inflated mattress is laid flat upon a bench, the polyethylene sheet side underneath. The stem of bananas is laid upon the mattress which is rolled around the stem and secured with sisal ties. The polyamide film provides such a tight gas and air barrier that the cushions are said to hold their air content almost indefinitely, or until deliberately deflated to flatten them for re-use. For bananas, the polyethylene sheet is perforated to allow for "breathing."

### GERMANY

#### *Automatic cheese wrapper*

A German firm has developed a machine for automatically wrapping cheese—either in rectangular shape or in wedges in a shrink-tight film wrap. This equipment, described in *Packaging* (England), will wrap 2,500 pieces per hour and should be a boon to the dairy industry abroad where no automatic equipment was heretofore available. The cheese portions are transported by means of a pocketed conveyor into the wrapping position. Here they are projected by the action of a plunger into a portion of the wrapping material, which is presented at an angle of 45 deg. to the horizontal. The plunger moves obliquely, pressing the cheese portion down into the web and carrying it through the frame-like opening which supports the edges of the web. By the action of forcing the cheese downward, the edges of the wrapper are drawn tightly around the sides of the cheese, forming a tray which contains it. Then wrapping is completed by the action of four sliding members, which move in over the upper surface of the cheese, carrying with them the edges of the wrap. Each of these members moves inward in turn and each is provided with heat-sealing means which smooths down the overlying thicknesses of film as they are sealed.

### FRANCE

#### *Automatic vacuum pouch maker*

A French firm specializing in packaging under vacuum, or in the presence of inert gas, has developed a fully automatic machine which takes packaging material from a reel and forms it into pouches which are filled, vacuumized or gas injected, then sealed in one continuous sequence. The new machine is described in *Packaging* (England). Pouches, edge sealed and transversely sealed are sized by suction grippers which transfer them in an arcuate movement into compartments on a rotor ready to receive them. The rotor comprises eight such compartments, each of a size adequate to receive the largest likely packet. Each compartment consists of a metal chamber having a hinged lid and within which the filling, vacuumizing or gassing, and final sealing are carried out. This equipment is designed to handle solids, such as bacon or cheese, as well as granular, powdered, paste-like or liquid products. According to the type of packaging material used, the web can be taken either from two reels, folded from one reel, or in the form of lay-flat tubing. The latter feature of the machine offers possibilities for using flat tubing of polyamide film to produce vacuum-tight packs from unlaminated material, according to the report. The machine will handle sizes from 100 by 100 mm. to 200 by 150 mm.

### FRANCE

#### *A study of polystyrene film*

A complete review of fabrication methods for polystyrene film, its particular characteristics, its permeability rates, its chemical resistance to acids and alkali solvents is presented in a six-page technical article in the November-December issue of *Emballages* (France). Edited by Pierre J. Louis, technical editor of this publication, the article is profusely illustrated with useful graphs and tables.

For additional information, write: World Report Editor, MODERN PACKAGING, 575 Madison Ave., New York 22.





PHOTOGRAPHY BY DICK BOYER



BERNARDIN closures  
keep good company!

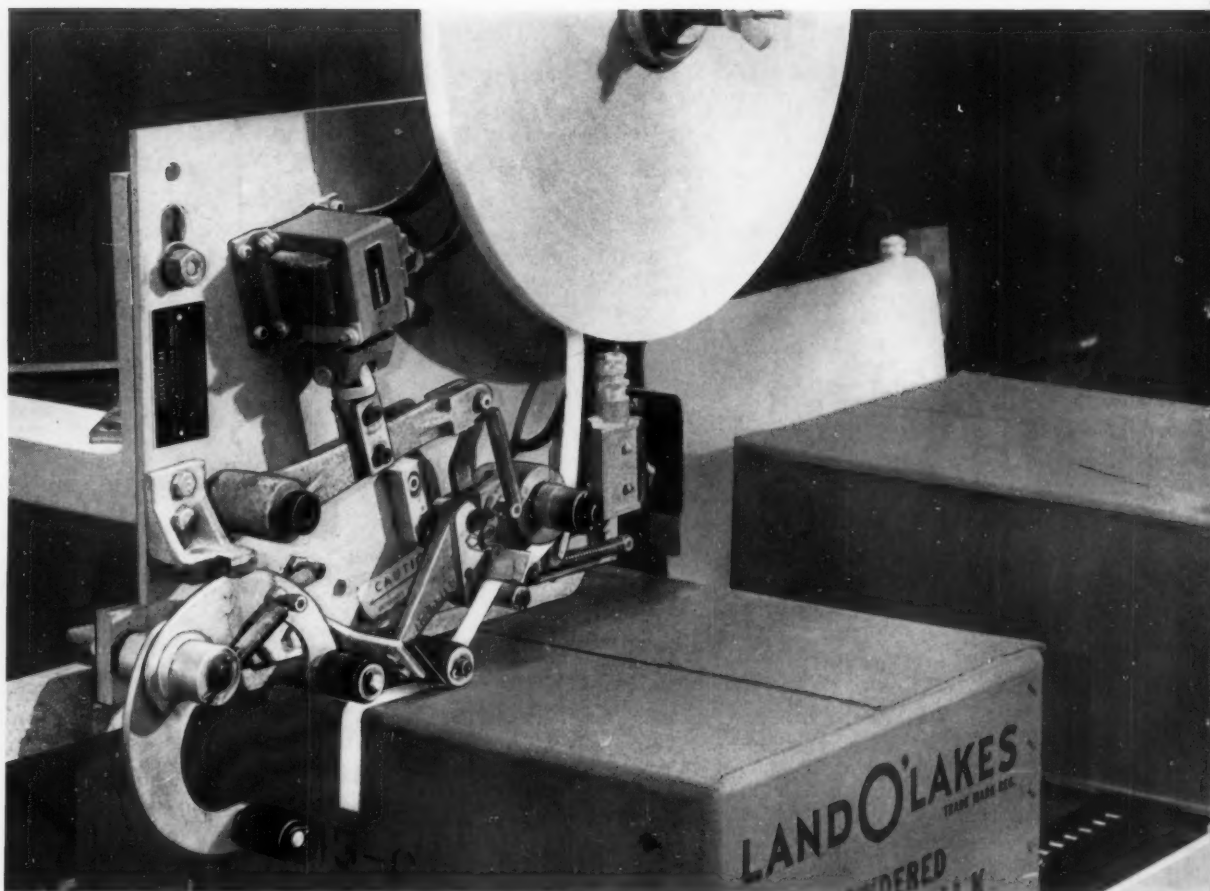
The trust inspired by a brand name such as Kraft is a priceless accolade bestowed by the consumer for the integrity of a product and its maker. Such an asset naturally is carefully protected. And sharing in that responsibility are the suppliers of accessories (like closures, for example) with the same standard of integrity. Such we like to believe is our relationship with the trusted name—Kraft. *May our Closure Craftsmen work with you?*

SINCE 1881 • BERNARDIN BOTTLE CAP COMPANY, INC., EVANSVILLE, INDIANA



TAPEnology... packaging's newest cost-cutting tool

***"3M-MATIC" Taping Equipment  
streamlines high-speed packaging  
... cuts production costs***



**Reinforce up to 30 cartons a minute... automatically!** Reinforcing cartons for overseas shipment is now a completely automatic operation at Land O'Lakes Creameries, Inc., Minneapolis. Thanks to "3M-MATIC" Taping and Dispensing methods, automatic reinforcing of 12 cartons a minute with super-strong "Scotch" Brand Filament Tape doubled previous production rate. In addition to giving better results, man-hours have been cut to practically zero. Only half as much reinforcing material is used. Production speeds of 30 cartons a minute are possible with the "3M-MATIC" system—on almost any size or shape carton.

"SCOTCH" IS A REGISTERED TRADEMARK OF 3M CO., ST. PAUL 5, MINN. EXPORT: 59 PARK AVE., NEW YORK, CANADA: LONDON, ONTARIO.

**MINNESOTA MINING AND MANUFACTURING COMPANY**

... WHERE RESEARCH IS THE KEY TO TOMORROW



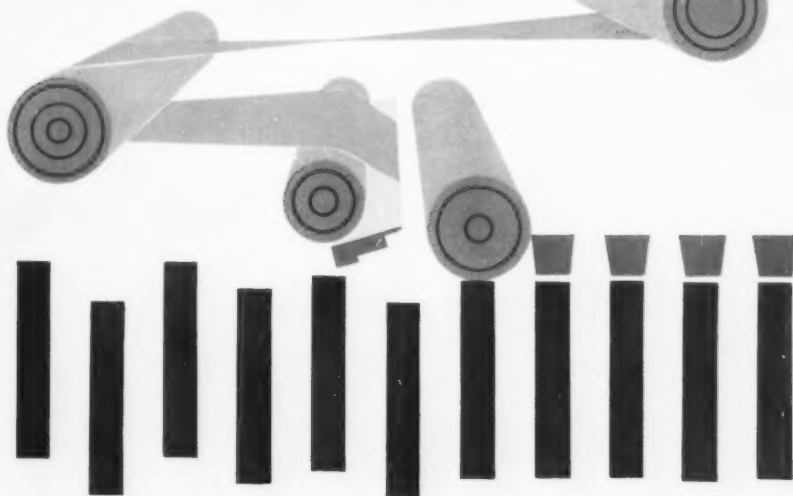




**TAPEnology  
presents...**

### **3M-MATIC**

***Taping and dispensing methods  
for high-speed packaging with  
"SCOTCH" BRAND TAPES***





# MARK

up to 300 units a minute



**Manually or 3M-Matically...**

**LABELING** or pre-price marking is fast, clean and easy with printed "SCOTCH" Brand Pressure-Sensitive Tapes . . . and completely automatic when applied with the "SCOTCH" Brand S-603 Pad Applicator. Taping head can be mounted on suitable conveyor systems to apply labels or price-spot tabs to a wide variety of products. Manually-operated dispensers are also available for price marking.

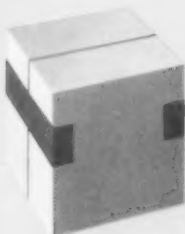
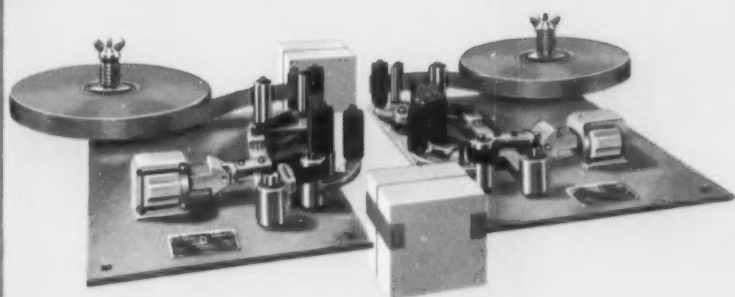


**Want more facts? Use the handy coupon**



# COMBINE

up to 75 units a minute



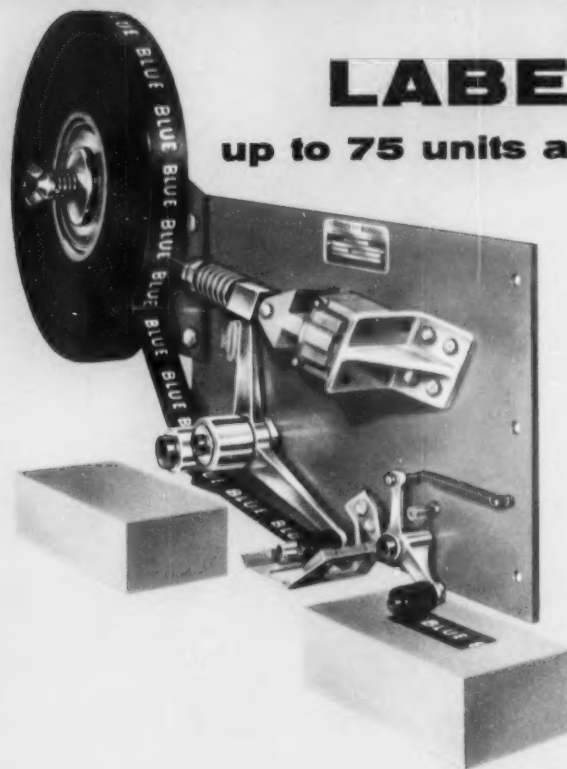
## **Manually or 3M-Matically...**

**BUNDLE** two or more units together to form combination deals; attach premiums to products... automatically. "Scotch" Brand S-69 Combination Bundlers mount on conveyor lines; apply tape "clips" at rate of 75 applications a minute; accommodate most colored and printed "Scotch" Brand Pressure-Sensitive Tapes. Tape is also economical, fast, and sticks at a touch for hand bundling methods.



**Want more facts? Use the handy coupon**



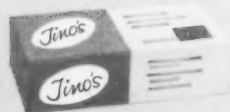
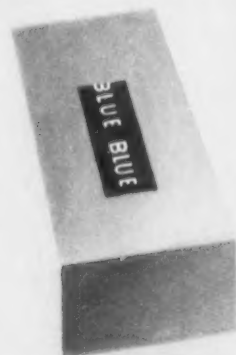


# **LABEL**

**up to 75 units a minute**

## **Manually or 3M-Matically...**

**"SCOTCH" Brand S-601 Flat Surface**  
Applicator can label automatically with any  
length of tape at rates of up to 75 units a minute.  
Can be adapted to index and register printed tapes  
precisely at the same high production speeds. Also  
available: adjustable definite length dispensers for  
manual taping applications.

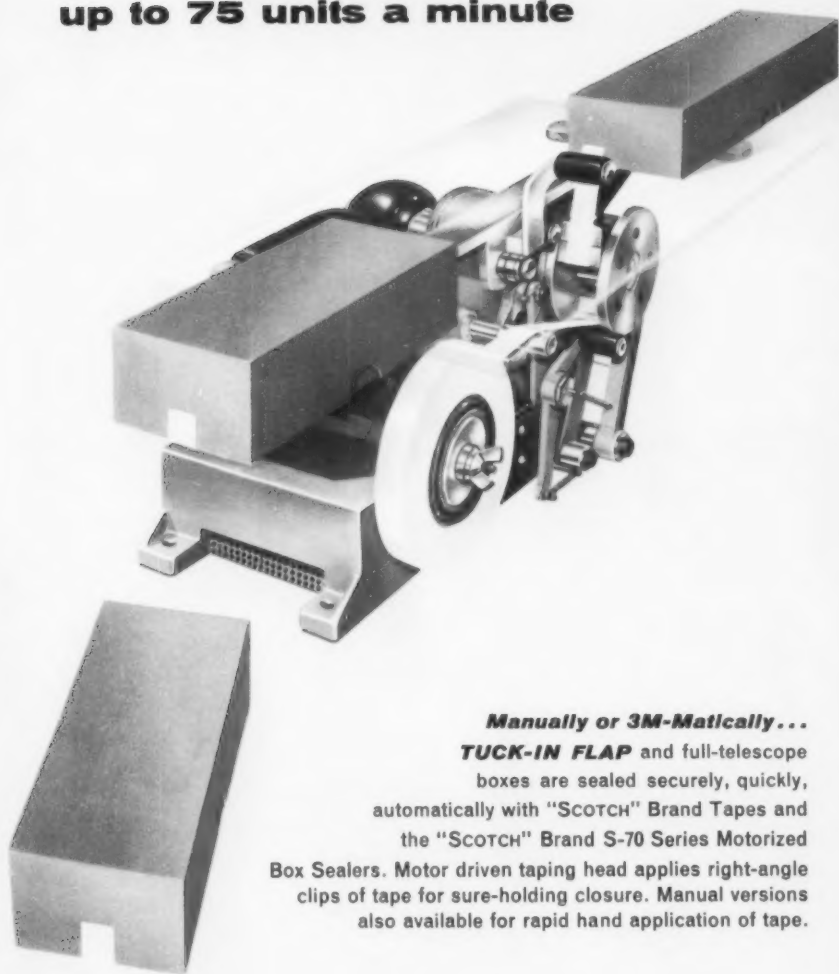


**Want more facts? Use the handy coupon**



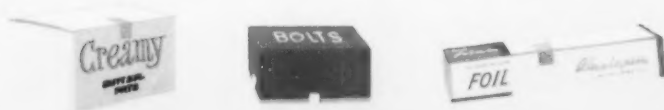
# SEAL

up to 75 units a minute



## ***Manually or 3M-Matically...***

**TUCK-IN FLAP** and full-telescope boxes are sealed securely, quickly, automatically with "SCOTCH" Brand Tapes and the "SCOTCH" Brand S-70 Series Motorized Box Sealers. Motor driven taping head applies right-angle clips of tape for sure-holding closure. Manual versions also available for rapid hand application of tape.



**Want more facts? Use the handy coupon**



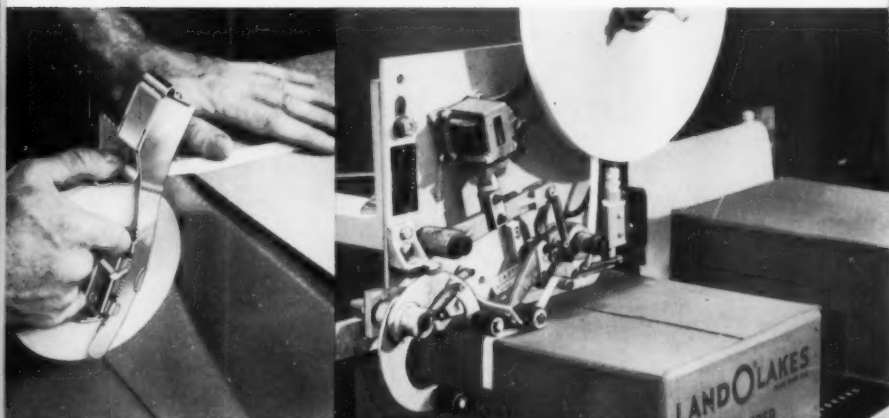
# **CLOSE, REINFORCE, BUNDLE, UNITIZE, PALLETIZE...**

## ***Manually or 3M-Matically!***

**"SCOTCH"** Brand Filament Tape is compatible with corrugated and solid fibreboard containers. Short strips eliminate the need for complete bands, yet give containers more mileage; distribute impact shock evenly; strengthen and reinforce critical score lines. What's more, tape doesn't cut into or damage package; cannot cut or injure workers; removes as easily as applied; is completely disposable.

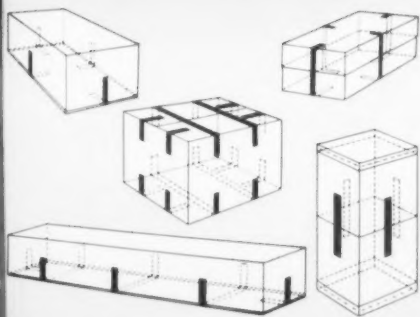
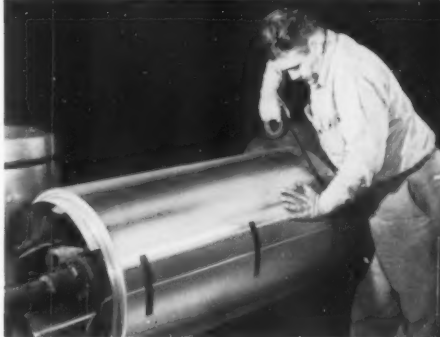
### ***whether applied manually... or 3M-Matically...***

there is no corrugated or fibreboard container made today that cannot be closed and/or reinforced with short strips of "SCOTCH" Brand Filament Tape for added service and mileage!



***Want more facts? Use the handy coupon***





A world of new  
ideas begins with  
**"SCOTCH" BRAND**  
Tapes for Packaging





**Send your message "home" with  
PRINTED "SCOTCH"  
BRAND TAPES!**

Easy-to-apply "SCOTCH" Brand Tapes—in a variety of colors or transparent—can be printed to label, identify, display, advertise, instruct, inform, or caution—for any product; on any shape container. Printed Tapes stick tightly; never smear; permit unlimited changes of message on standardized packaging stock or containers. Can be applied at high speeds with a wide variety of "3M-Matic" Dispensers and Applicators. Use coupon for complete information.



3M Company, 900 Bush Ave. Dept. ABC  
St. Paul 6, Minn.

Please send me complete information on items checked:

- ☐ MARKING ☐ COMBINING ☐ SEALING  
☐ LABELING ☐ CONTAINER REINFORCING  
☐ PRINTED TAPES

NAME \_\_\_\_\_

POSITION \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

**MINNESOTA  
MINING AND  
MANUFACTURING COMPANY**

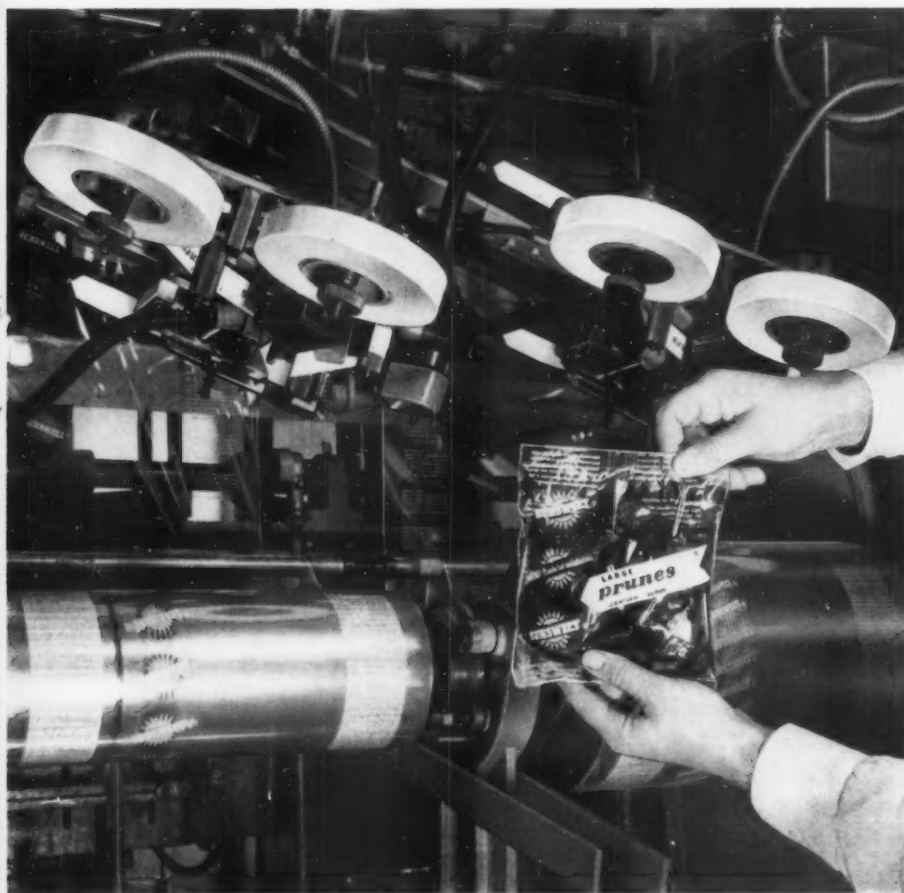


... WHERE RESEARCH IS THE KEY TO TOMORROW

"SCOTCH" is a registered trademark of 3M Co., St. Paul 6, Minn. Export: 99 Park Ave., New York 16; Canada: London, Ontario.



**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND<sup>®</sup>  
**SCOTCH**  
BRAND  
**SCOTCH**  
BRAND



*When tape costs so little, why take less than . . . . .*



# Machine-ability



## POTLATCH PAPERBOARD

Converters count on *controlled wax consumption* with Potlatch Paperboard, a quality which guarantees superior machineability and profitability.

PFI Board breaks properly along score lines and you can custom order coatings to meet the needs of your die-cutting, waxing, and printing equipment.

Ability is built-in with Potlatch . . . pioneers of solid bleach frozen food board stock.



**POTLATCH FORESTS INC.**

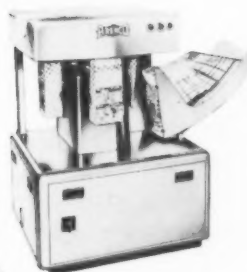
PAPERBOARD DIVISION-GENERAL OFFICES-LEWISTON, IDAHO



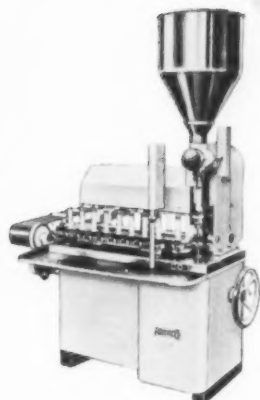
symbol  
of quality

THE COMPANY WITH "ABILITY"





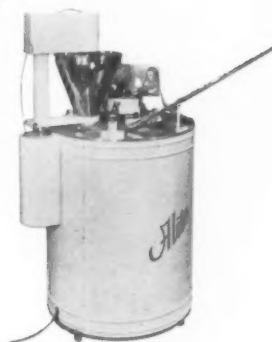
**Arenco VUF** bag feeding and opening machine feeds and opens up to 2000 bags per hour . . . for use in combination weighers or portioning machines and a bag sealing machine



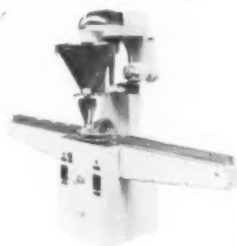
**Arenco GAB** tube filling machine for semi-fluid materials ranging up to stiff pastes fills up to 3500 tubes per hour



**Arenco GAN** high-speed tube filling machine, is similar to GAB but with special feed and dual filling nozzles. Fills up to 7000 tubes per hour.



**Alite** fully automatic powder compressing machine fills up to 1200 units per hour



**Alite** loose filling machine puts 16, 32 or 48 fills per minute into rigid containers of 1/4-oz. to 3-lb capacity

## Whatever your container... There's an Arenco machine to fill it for you

Whether it's a jar . . . a tube . . . a lady's compact . . . a bag . . . a sterile vial . . . a tin . . . or a carton, there is an Arenco machine especially designed to fill it, rapidly and efficiently. A sampling of the Arenco line is shown in the cut above, including the famous Alite line of powder filling machines. Speed, cleanliness, rugged construction and ease of maintenance are all integral design features of this famous series of filling machines. Parts and service for any machine is as near as your telephone; Arenco maintains an expertly staffed, fully equipped plant right here in the U.S. For prices and complete specifications of any of these units, write us today.

MANUFACTURERS OF FILLING, CAPPING, SEALING AND PACKING MACHINES



**ARENCO MACHINE  
COMPANY, INC.**

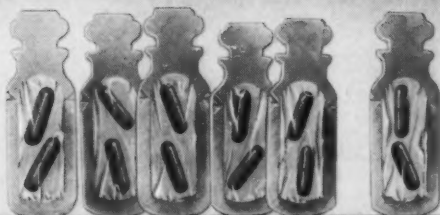
25 West 43rd Street  
New York 36, N.Y.



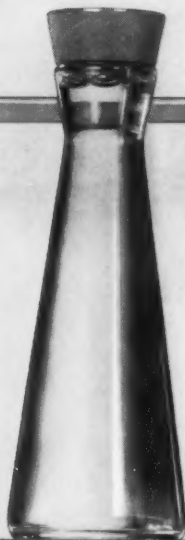
Ivers-Lee... a company of people, plants and Ideas...



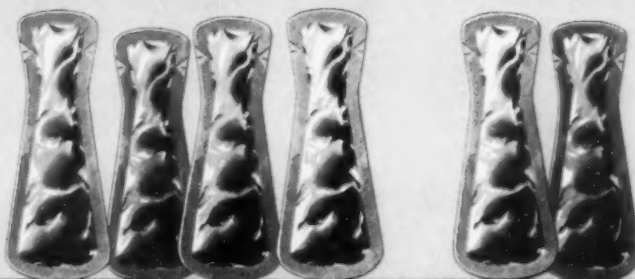
**pharmaceuticals,**



**foods,**



**cosmetics**



**...unit-packaging sells them faster!**

IL created packages, machines  
and methods fully covered by  
U.S. and foreign patents.

No matter what product you sell—solids, liquids or powders... Ivers-Lee Unit-Packaging sells it faster, saves time and money for you and your customers. Each convenient Unit-Package contains just enough for one dosage, application or meal—and these individually-sealed, sanitary flexible film Unit-Packages continue to lock in every bit of potency, freshness or flavor until the moment they're used.

You can virtually guarantee that your products will be easier to handle, absolutely sanitary, and factory-fresh, no matter where they go.

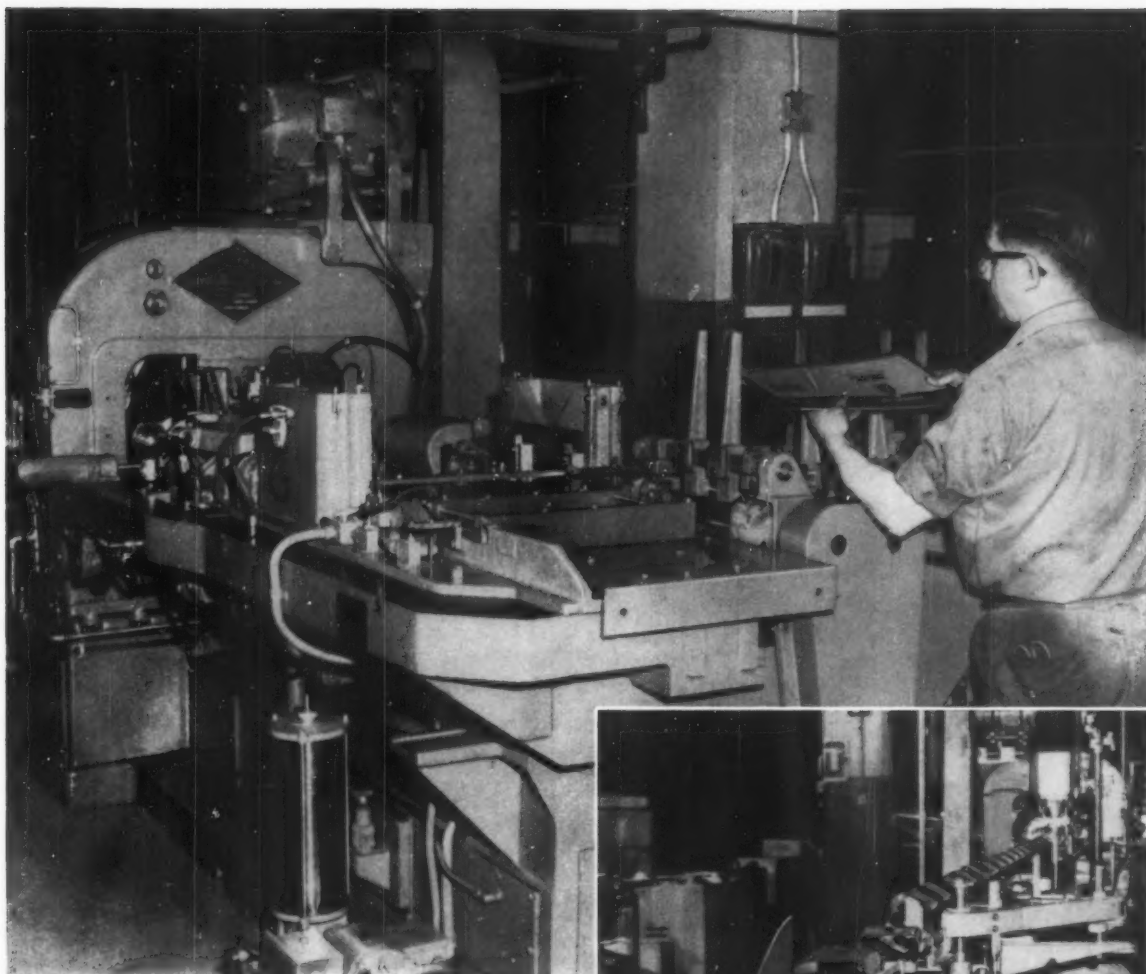
For any product, in any industry, nothing beats the convenience and economy of Ivers-Lee Unit-Packaging. Call your Ivers-Lee account man today!



**Ivers | Lee Co.**

217 CENTRAL AVENUE, NEWARK, NEW JERSEY  
Ivers-Lee Company (Canada) Ltd., Brampton, Ontario

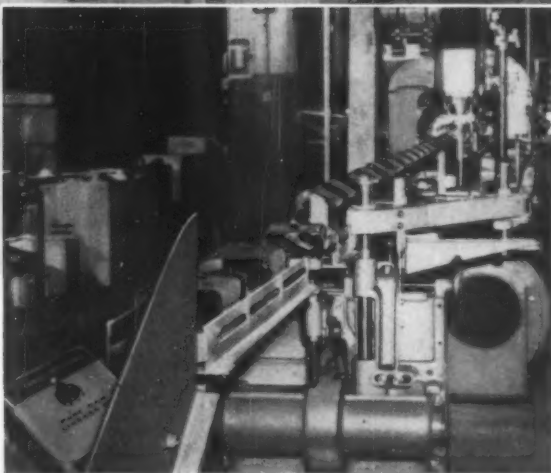




## BIG SQUARE CANS at 75 gallons per minute

A Hamilton 202-L Bodymaker is doing just that at Sherwin-Williams' Chicago plant. It produces gallon-sized can bodies at a steady rate of 75 per minute. This same machine, with minor accessory changeover, will produce can bodies in the following shapes and sizes:

- ROUND CANS —  $3\frac{1}{2}$ " diameter x  $7\frac{3}{4}$ " high  
2" diameter x 12" high
- RECTANGULAR —  $4\frac{1}{2}$ " x  $3\frac{5}{16}$ " minimum base size  
8" x 5" minimum base size
- SQUARE —  $6\frac{1}{2}$ " x  $6\frac{1}{2}$ " minimum base size



It produces round cans at twice the speed—150 per minute.

A Hamilton Model 304 Rotary-Flanger, used in conjunction with this Bodymaker at Sherwin-Williams, leisurely but precisely handles this rate of can bodies. Finite tolerances on all parts of both machines permit perfect, unscratched production of cans which are, for many runs, lithographed in the flat.

Hamilton makes a complete line of the fastest can making machinery available. It can make profits for you right now. Write for information and literature today.

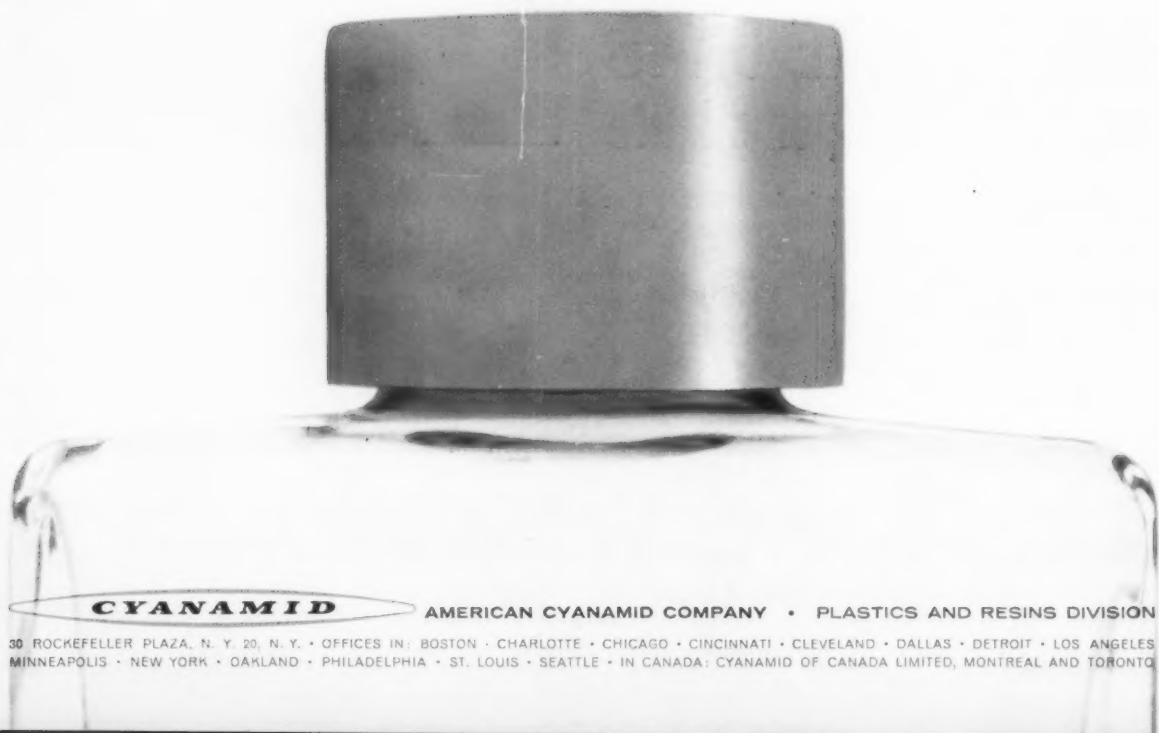
**BALDWIN · LIMA · HAMILTON**

Industrial Equipment Division • Philadelphia 42, Pa.





Manufacturers of consumer products using container caps know that BEETLE® plastic has never failed them in twenty-five years of steady use. Even perfume esters and acetone solvents make no headway against molded BEETLE urea. On the shelf, BEETLE closures won't build up electrostatic charges that attract unsightly dust. And they hold firm and tight during shipment and storage. BEETLE comes in any color, can be molded in practically any shape, to fit any design. Keep your customers happy and content by specifying BEETLE plastic caps every time.



**CYANAMID**

AMERICAN CYANAMID COMPANY • PLASTICS AND RESINS DIVISION

30 ROCKEFELLER PLAZA, N. Y. 20, N. Y. • OFFICES IN: BOSTON • CHARLOTTE • CHICAGO • CINCINNATI • CLEVELAND • DALLAS • DETROIT • LOS ANGELES  
MINNEAPOLIS • NEW YORK • OAKLAND • PHILADELPHIA • ST. LOUIS • SEATTLE • IN CANADA: CYANAMID OF CANADA LIMITED, MONTREAL AND TORONTO



**Chairman of the board**  
Charles A. Breskin  
**President and publisher**  
Alan S. Cole

**Editor**

Lloyd Stouffer

**Senior editor**

Pearl Hagens

**Managing editor**

Thomas M. Jones

**Associate editors**

Gladys Tarragano  
William C. Simms  
Roland R. MacBride

**Engineering editor**

Robert J. Kelsey

**Technical editor**

Charles A. Southwick, Jr.

**Midwest editor**

Sarah Lee Gerrish (Chicago)

**Reader service editor**

Florence Getter

**Patents editor**

H. A. Levey

**Librarian**

Carol Grossman

**Art director**

Donald R. Ruther

**Production**

Daniel M. Broads, *director*  
Verna Retzlaff, *assistant*  
Irving L. Litt  
Harry Baron

**Circulation**

Robert Birnbaum, *director*  
George Leiz, *subscription manager*  
Robert Hoffman, *reader development*

**Promotion**

Ezra Pincus, *manager*

**Treasurer**

Beatrice Grove

**Business staff**

Stuart S. Siegel, *manager*  
Perry H. Backstrom  
Robert C. Nilson  
Benjamin R. Stanton  
Theodore B. Breskin  
Philip W. Muller  
Michael Stoller  
Jack Post

Chicago 11, 101 E. Ontario St.  
Phone DElaware 7-0060  
James M. Connors, *vice president*  
William F. Kennedy  
Thomas O. McDonough  
John Wemple

Cleveland 20, 3537 Lee Rd.  
Phone SKyline 1-6200  
Robert C. Beggs  
Richard H. Rogers

Los Angeles 48, 6535 Wilshire Blvd.  
Phone OLive 3-3223  
James C. Galloway

Atlanta 3, 1722 Rhodes Haverty Bldg.  
Phone JACkson 2-8113  
Gus Krimsier

London E. C. 4, England  
29 New Bridge St., Phone CLy 3019  
Howard Williams

Frankfurt, Germany  
Wittelsbacher Allee 60, Phone 46 143  
Georg J. Linder

## Editorial Memo

### The question of size

**H**ow big should a package be? When a heckler asked the tall, gangling Abraham Lincoln how long a man's legs ought to be, he hitched up his trousers and replied: "Long enough to reach the ground."

The question of packaging sizes is perennially a problem for marketing managers and is even more of a headache today when store managers are fighting the great multiplicity of sizes just as they fight all demands made of them for more shelf space.

You may look in one direction and find that consumers are flocking to small and even miniature packages; look in another direction and you'll be convinced that the big economy size is still king.

Home economists point out that in the relaxed pattern of modern living there is much greater variety in food serving in many families, to please individual tastes. With today's convenience foods, it's easy to heat and serve portions of spinach to Mother and Dad, peas to Junior and Sis, if that's what they prefer. So there's a trend in one direction toward the servings-for-two size in frozen foods.

On the other hand, there's also a trend toward larger families and, where togetherness is the rule, housewives are demanding larger packages that serve six instead of the usual three or four. So it looks like the frozen-food packers may have to go both ways. Canners, too, are noting a demand for both larger and smaller size: generally, their rule is to go larger on staple, family items such as baked beans and spaghetti, smaller on specialty items where tastes are more apt to vary.

The modern housewife will sometimes pay a staggering premium for convenience. Someone has figured out that salt in those little individual plastic shakers costs the consumer 3,100% more per ounce than salt in the conventional 1 lb., 10 oz., package. But it has been a marketing hit. Beer in the 7-oz. bottle costs considerably more per swig than beer in the 12-oz. size—but it sells, because many figure that being forced to drink more than they want at a sitting is poor economy.

In non-foods, where there is no question of waste in leftovers, the case for the big economy size should be more clear cut. When Monsanto introduced "All" detergent, it established an immediate success with a 25-lb. package which retailers thought too heavy for the housewife to carry home. On the other hand, millions are now paying a premium to get exactly the same detergent in a convenient unit package that is just big enough for a single load of washing.

There is no easy answer to the size problem. For each product, size must reach to the sound ground of consumer preference, which can only be established, area by area, by marketing research and sales experience.

*The Editors*

Modern Packaging, Executive and Editorial Offices, 575 Madison Avenue, New York 22, N. Y. Teletype: TWX-NY 1-3063. Cable address: "Breskinpub."



From Nashua's talent with paper and packaging . . . new products that do more for you . . .

## Originated by Nashua . . . Davac\*. . . the gummed paper that prints, handles, looks as if it isn't!

Davac is different! *So* different, you can forget that it's gummed at all! You get the same high-fidelity printing that you do on ungummed papers. You get the same "handle-ability." Davac's unique adhesive lets the paper breathe . . . prevents curl . . . makes it ideal for stamps, stickers, labels, office forms . . . any gummed job you can name.

This modern label paper is another example of Nashua's productive research with paper and printed packaging. Find out how Nashua can help *you* cut costs . . . improve production . . . or stimulate sales.

Write Nashua Corporation, Dept. MP-20, 44 Franklin St., Nashua, N. H.

\*Davac, Reg. U. S. Pat. Off. No. 2793966

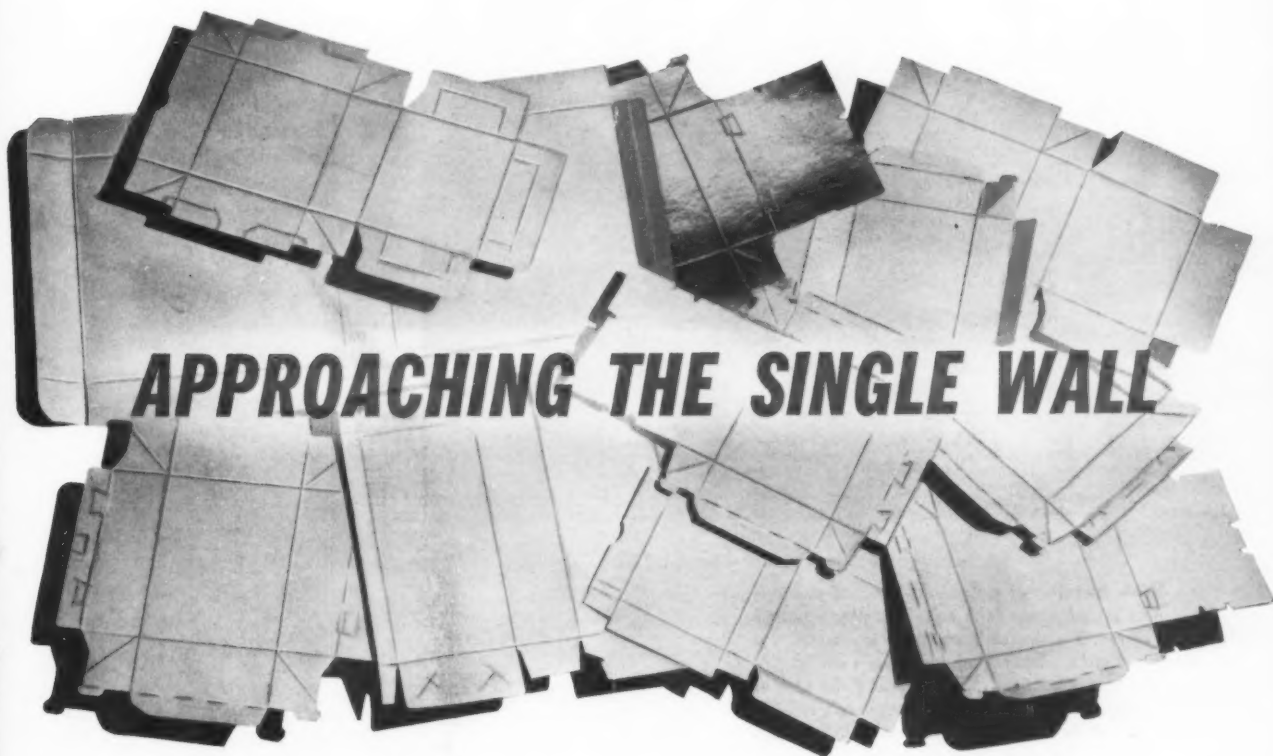


Nashua talents available to you: Package Engineering • Creative Design • Paper Chemistry • Coordinated Packaging • Quality Production • Procurement Versatility

**NASHUA**   
*Corporation*

In Canada, Nashua (Canada) Ltd. Peterborough, Ontario





*Improved, sealed carton constructions that eliminate liner or overwrap mark progress toward a great goal.*

*Here are facts of vital interest to the users of folding boxes*

**I**t is a logical conclusion that all the protection needed for most products in folding cartons will some day be incorporated in the single wall of the carton itself, eliminating both overwraps and inner liners. Although there are still very few actual "single walls," significant progress in that direction has been made in the last two years. Through improved coatings and constructions, many packages have already succeeded in eliminating either a liner or an overwrap, if not both.

It will be well for all packagers—whether in foods, chemicals or cosmetics—to keep an eye on this development. Even if a laminated or coated carton

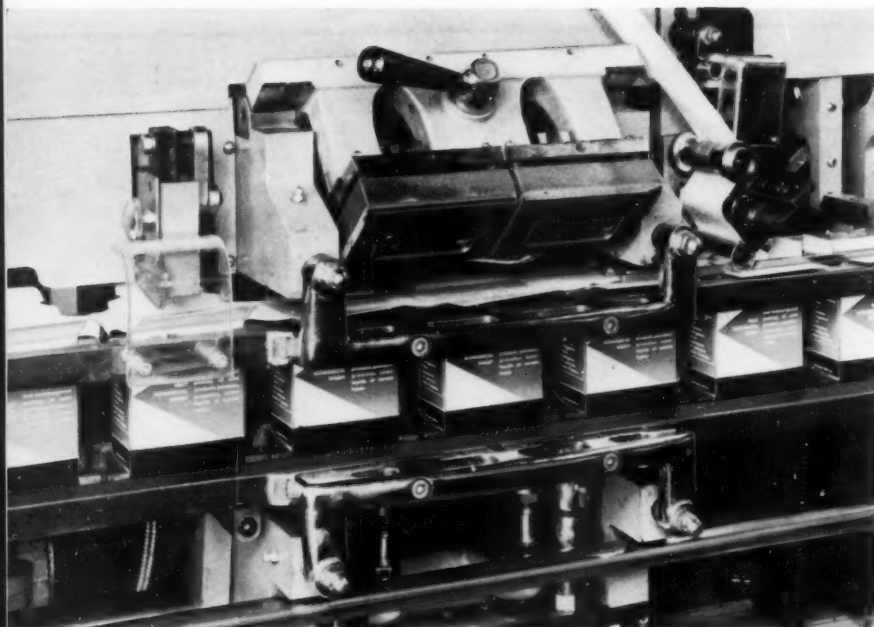
may in itself represent no saving over the use of separate liners and wraps, it will be of great importance to packagers in eliminating one or even two machine operations and also in saving space.

#### **The ideal carton**

Most packagers have no difficulty in describing what they are seeking in simplified cartons for moisture-sensitive or sifting products:

The ideal package must consist of a single sheet or wall of paperboard with a fine external printing surface and an inner extrusion coating or lamination that will form an impervious barrier to grease, gas





**Web barrier** of polyethylene-coated paper is heat sealed across both ends of a plastic-coated carton. This Swedish technique is reportedly a superior guard against sifting and oxygen and water-vapor transmission in the flap area of the carton. The high-speed machine (photo above) seals roll-fed paper with twin heat-sealing dies (center). Packages are cut apart by reciprocating knife (left).



and water-vapor transmission. Designed to run on high-speed lines and sealed by either heat or adhesive, the carton must have no pinholes in the corners to impair the barrier, yet the package must be easy to open and must provide effective reclosure for multi-use products.

Obviously, for food products, any package component that may migrate to the contents must be acceptable under the new Food Additives Amendment. Thus, there is even greater reason now to turn to an inert inner lamination or coating which will be a true barrier in all respect. Still under question, however, are the adhesives and other materials necessary to effect a tight seal, which must eventually win Food & Drug Administration acceptance.

The perfect barrier carton has not yet been devised. In truth, the final solution will most likely be

several types of cartons, each tailored for the particular type and degree of protection required by the three main classes of products involved: (1) frozen foods, (2) such single-use dry products as cake mixes and desserts, and (3) multi-use items requiring reclosure, such as cereals. But most packaging experts agree that from the point of view of production economy the single-wall carton is the ultimate answer to increased costs of labor, machines and floor space, and is bound to come for virtually all dry and frozen foods and some non-foods, too. Already, a half-dozen frozen foods and at least one cereal product are in wrapless and linerless cartons.

#### Progress report

So complex are the problems involved in developing such simple cartons that it has taken the



combined efforts of many packagers, paper men, adhesives suppliers, printers, carton makers and mechanical experts to achieve the present progress.

Here are the achievements attained to date that are significant to many packagers:

1. Among the early steps is the so-called "wax-wall carton," such as developed for General Foods' Post Cereals. This has no liner or overwrap as such, but the gravure-printed outer paper is wax laminated to the surface of the board prior to carton manufacture, so that it is, in effect, a single board with an inner wall of wax as the moisture barrier. This not only has eliminated much overwrapping in the cereal plant, but obviates need for an inner bag or liner for many types of cereals and similar products.

2. Cartons with improved locking arrangements which give them greater rigidity have been adopted for many frozen foods. With wax-blend or polyethylene inner coatings, these need no inner liners and, if printed, do not necessarily require an overwrap.

3. Smoother bleach board and the development of trailing-blade coaters have led to highly printable board surfaces that have encouraged use of tightly sealed waxed cartons without overwraps.

4. Harder, more scuff-resistant coatings, varnishes and lacquers, including polyethylene extrusion coatings such as for Schrafft's (Glamakote, Marathon)<sup>1</sup> have come out of the laboratories to give a highly

polished, glamorous look to a paperboard surface.

5. Web-cornered cartons, containers with pre-formed liners and pouch-in-carton packs—while not all single-wall structures—have generally reduced the cost of the container and the number of packaging operations. They are increasingly used for liquid and other very wet products, are reportedly already making strong inroads on established fibre containers and have virtually eliminated separate linings for many frozen-food cartons.

6. Though hot-melt adhesives have been used for most single-wall cartons so far, dielectric heating with special adhesive formulations has been devised for effective cold-glue sealing. To eliminate heat sealing on some polyethylene extrusion coatings, glueable formulations have been devised that can be handled on standard carton-closing machinery.

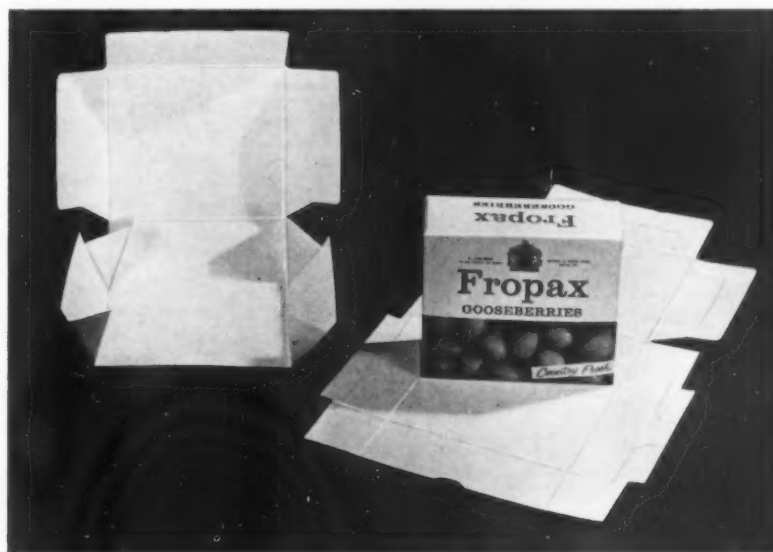
7. Now available are cartons with heat-sealable polyethylene extrusion coatings, foil laminations, full-web closures across the ends and calked flap joints that are claimed to be equal or superior in barrier properties to the conventional types of overwrapped or inner-lined folding cartons.

#### Packager and consumer reaction

To date, applications of simplified cartons have followed each technical improvement in the packages. Principal uses have been for frozen foods which do not have a severe barrier problem. Cake mixes and other one-shot dry products are just be-

<sup>1</sup>See "Schrafft's Goes to the Supermarket," MODERN PACKAGING, Sept., 1959, p. 108.

**Pre-printed glue pattern** on a new British carton utilizes thermoplastic adhesive and integral web-type flaps on carton for barrier protection. This technique is said to economize on glue and eliminate messy sealing operation.





ginning to shift to this type of carton. Reclosure products have not generally adopted them yet, awaiting the development of sure reclosures.

Despite the growing number of uses of the new packages, their merchandising acceptance is yet to be determined. Surveys of cartons now on the market show ready consumer approval for frozen foods in printed, wrapless cartons. However, some consumers reportedly are suspicious about the elimination of inner liners—somehow mentally crediting these barrier layers with product protection and sanitation.

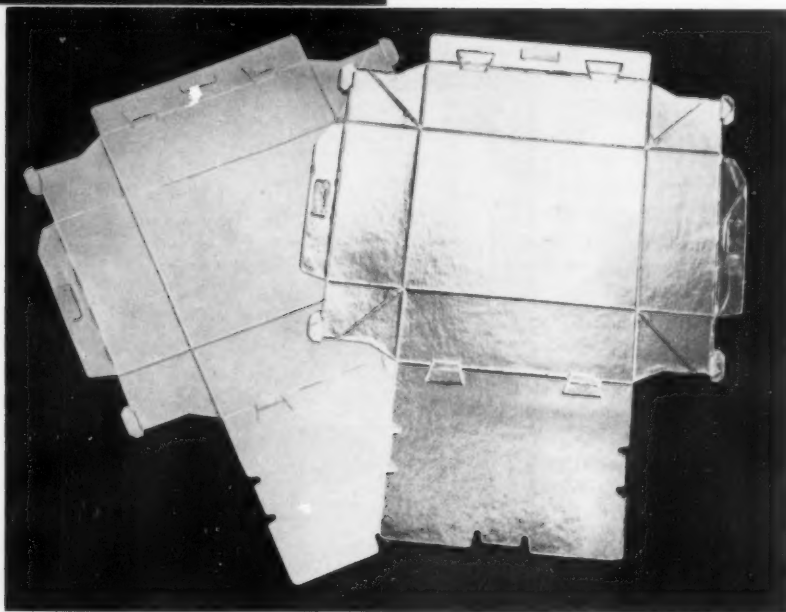
An important reason for packager caution in approaching these new packages is that new carton designs usually necessitate special opening and closing

machinery, and sometimes even modifications of long-established filling techniques. Design of such equipment is no problem—machines exist or have been worked out in prototype for speeds of 400 or more cartons per minute despite complex heat-sealed or glued carton structures. But the high capital investment for some of these new machines and the costly scrapping of standard equipment and packaging procedures demand a careful look.

Super-barrier cartons containing special coatings, laminations, opening and closing devices, or other intricate constructions may cost more or may operate on packaging equipment that is considerably slower than that to which packagers are now accustomed.



**Surface laminations** of foil or of polyethylene (photo below) seal board carton surfaces—main areas of moisture and oxygen migration—and may upgrade web-flap locking cartons for use as wrapless frozen-food containers. Overwrapped waxed cartons of this design are now in volume use (photo at left) for both wet and viscous frozen products. Inner liners have been eliminated.





These problems, however, appear to be typically developmental. Long-range prospects for the packages are favorable and suppliers report that they are confident of operating speeds in excess of 500 per minute for barrier cartons within a few years.

#### Areas of progress

Interesting developments have taken place in three key areas of package engineering. (1) the barrier surfaces of cartons, (2) the flap design and (3) the opening and closing devices for cartons.

While there is room for argument over the barrier qualities of waxed paperboard cartons—much depending upon the quality of the wax coating, the carton construction and the effectiveness of its sealing—most packagers feel that without inner or outer wraps, waxed paperboard alone does not sufficiently protect moisture-sensitive dry products or frozen foods. Hence, interest is keen in new techniques for applying thin foil laminations and extrusion coatings of plastic—primarily polyethylene—to bleached board. Some of these structures, now available to packagers, are reported to be competitive in price with standard overwrapped cartons.

First approaches to such high-barrier surfaces were not in single-wall packages, but involved three types of cartons with full, integral liners. These constructions generally need no overwrap.

One, a Swedish import ("Hermetet," Diamond National Corp.), has been used in this country for sugar<sup>2</sup> by Savannah Sugar Refining Corp. and consists of a carton with a pre-attached liner coated with 5 mils of polyethylene. The liner is interlocked with the carton flaps during the sealing operation and replaces a conventional inner pouch.

The second package, of more recent introduction, also incorporates an attached polyethylene-coated (1 mil) paper liner heat sealed before the carton flaps are closed with a glue seal ("Fibrematic," Fibreboard Paper Products) and has been used by Birds Eye<sup>3</sup> and others to replace fibre cans with metal ends.

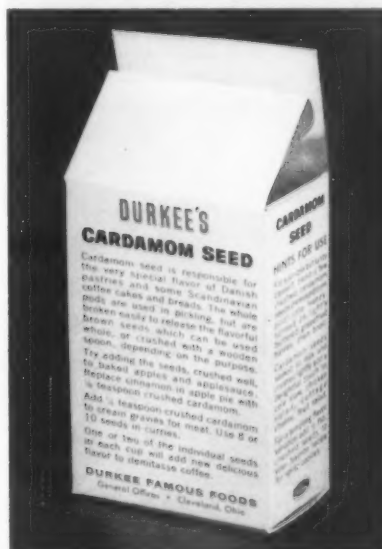
The third, a pouch-in-carton pack (Crown Zellerbach) utilizes an unattached separate 2 $\frac{3}{4}$ -mil polyethylene pouch, put up on a form-fill-seal machine, that is simply enclosed in a carrier carton<sup>4</sup>. Pioneered in use by Shasta Packers, Watsonville, Calif., this container is now fairly widespread on the West Coast as a replacement for fibre frozen-food cans.

In more recent developments, thermoplastic coatings have been added directly to the cartonboard.

One example is a Swedish carton now available in



**Reclosure** for dry-product cartons that shows much promise is this combination tuck-and-glue-flap construction used on a line of whole spices. Outer flap is glued over inner tuck flap (photo below). The package is opened by breaking perforations on tuck side of carton (photo above).



<sup>2</sup>See "Siltproof Folding Carton," MODERN PACKAGING, Oct., 1957, p. 129.

<sup>3</sup>See "A New Liquid-Tight Carton," MODERN PACKAGING, Aug., 1959, p. 90.

<sup>4</sup>See "Pouch-in-Carton For Frozen Foods," MODERN PACKAGING, Oct., 1959, p. 111.

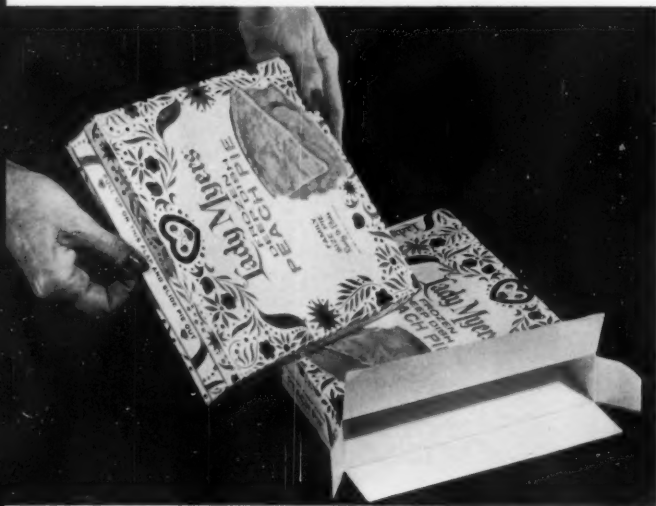


the United States ("Expresso," Mead-Atlanta)<sup>5</sup>. Claimed to be both siftproof and liquid-tight, this package is coated on the inside with about 1 mil of polyethylene and is securely closed with webs of polyethylene-coated paper that are heat sealed across the ends of the container and the opened flaps to eliminate pinholes at the corners of the carton. No other liner or overwrap is needed. For super-barrier requirements, polyethylene- and saran-coated foil as well as other materials are also said to be practical for this package. Used in big volume in Sweden—where AB Findus, a leading frozen-food packer, distributes more than 50 million cartons per year—this package has recently won its first U.S. application at Sesa-Kraft, Inc., Chicago.

Also being used for frozen foods in England is a new carton ("Diotite," Metal Box Co., Ltd.) which is wax coated inside and out, and is used without liner or overwrap. It has a web-corner construction and its special feature is that sealing areas are "pre-printed" with a thermoplastic adhesive pattern, permitting a tight heat-seal closure and eliminating glue pots in the packaging operation. Experiments are now under way to substitute an extrusion coating of polyethylene in place of the present wax blend to boost its barrier properties and fit it for application to the more sensitive products.

<sup>5</sup>See "Sweden's Leakproof Carton," MODERN PACKAGING, Feb., 1960, p. 88.

**Easy-opening feature** for tightly sealed glue cartons is essential. One of the simplest is an unglued extension on one flap that gives a good grip. Fibre-tearing closure of this waxed carton is made with a cold adhesive, driven into the board by an ultra-high-frequency technique.



Flap construction has undergone many recent changes that started with web-type corners on locking cartons for frozen foods (Kliklok Corp.). This design, which prevents pinholes that drain off liquids, almost immediately eliminated inner liners traditionally used for such wet products as spinach and squash (although it does not eliminate the overwrap) and was quickly adopted by Birds Eye, then by other food packagers. The idea is now applied to the latest type of glue-flap cartons.

#### Calk seal

Another method for eliminating pinholes is a recently developed calked flap ("Calk-Seal," Packaging Corp. of America). Handled at speeds of up to 300 cartons per minute, this special package has extra tabs, called Van Buren ears, which are sealed over the edges of the carton with a ribbon of plastic hot-melt material that reportedly eliminates any minute openings which might allow sifting.

First application of this packaging technique is at Pillsbury Mills for a new carton of dehydrated hash-brown potatoes. This container, which is lined with a lamination of glassine, not only eliminates previous inner product pouches, but offers an interesting solution to the reclosure problem for multi-serving products. It requires no overwrap.

The carton contains a glued center divider, which is a fifth-panel extension of the regular carton wall. The product is filled automatically into both of the resultant carton chambers and the flaps are closed and glued with a conventional cold resin adhesive. Then the calking compound—comprising a blend of waxes, polyethylene and butyl rubber—is applied to four Van Buren ears located at the top and bottom of the package. When these extra flaps are folded into place, the calking compound spreads into the flap crevice, assuring, it is said, a tight, siftproof seal. The compound is designed to stay pliable throughout the life of the carton, maintaining a high barrier to penetration by either moisture or insects.

Pillsbury has skirted the problem of reclosure for this multi-serving product by incorporating perforated openings on both ends of the top of the carton. Thus the user, following instructions, opens only a single compartment at a time. Glue tabs on the central partition, which are adhered at the time the carton is closed, maintain the seal on the unused compartment until the second perforation is opened.

#### New flap constructions

The trend toward steadily lighter boards in frozen-food packages—now down to 12-point—necessitates better flap construction not only to give an effective hermetic seal, but to prevent crushing of the package during shipment. This problem, aggravated by the





**Multi-flap** construction in this glassine-laminated carton, including a vertical center panel with glue tabs, enables tight gluing, full separation of internal compartments, each holding four-serving portions of dehydrated potato product.



**External calking** with a wax-polyethylene-rubber compound under the outside Van Buren ears seals vital corner areas on the carton against moisture and insects. Opening instructions appear on sides and on both halves on the top panel.



**Easy opening** of carton through multiple seals is insured by die-cut perforations around top ears. Perforations pierce board, but not the glassine lining. Top is ripped back to expose one compartment, while other remains tightly sealed.

elimination of the overwrap, is solved by some web-and-glue-flap designs—reportedly so strong that such a package can be thrown against a wall without breaking. These cartons also reduce crushing because of the multiple layers of board that are used in the flap-sealing area.

Since heat seals or hot-melt glue seals are tough to tear, opening devices are almost a necessity for tightly sealed single-wall packages. Developments have been continuous. Recent innovations in frozen-food cartons include tear-strip panels which utilize single perforations, such as used by Chet's Famous Foods, Eugene, Ore., or offset score lines that go only part way through the board, as in a carton employed by Gorton's of Gloucester. Both types of wrapless containers are sealed by over and inner coats to preserve the barrier (Weyerhaeuser Co. and Container Corp. of America).<sup>6</sup> Another approach is the use of end flaps with extended unglued tabs that permit a good grip for breaking the glue bond (Container Corp.). Perforated end flaps are used for easy opening ("Diotite") and now under test are various other tear-string and tape openers.

Reclosing structures are a different story—and

much more difficult to devise. Yet, tight reclosures will be essential if single-wall packages are to win wide use as containers for such products as breakfast cereals. One direct answer may be a modification of the glue-and-tuck flap, as used on a recent wrapless and linerless carton for whole spices by Durkee, where the original glue flap is broken on the hinge side by the consumer to reveal an extra flap that can be tucked back (Marathon)<sup>7</sup>. Another suggestion, now being explored, is the insertion of a partial liner in the top of the carton, which could be folded over to make a tight re-use seal.

In instances of severe product or environmental conditions, pressure-sensitive adhesives, including cohesive adhesives already used for reclosable film bags, may be practical on carton flaps.

All this diverse activity adds up to significant progress toward the ultimate single-wall carton. New laminations and plastics, unusual formulations of adhesives and fresh ideas in carton structure are being tested by both packagers and suppliers. The drive for economy and fresh-package convenience is continuous and will undoubtedly produce marked changes in this packaging field within two years.

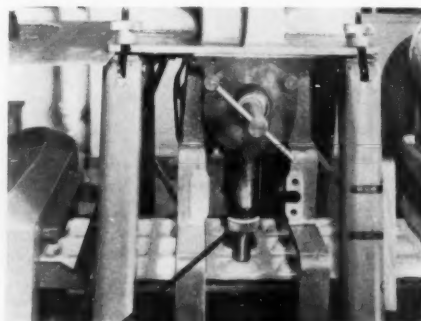
<sup>6</sup>See "New Cold-Glued Wrapperless Carton," MODERN PACKAGING, Oct., 1959, p. 124, and "Tear-Strip Carton for Frozen Foods," MODERN PACKAGING, March, 1958, p. 168.

<sup>7</sup>See "Glue Flap that Tucks Back," MODERN PACKAGING, May, 1959, p. 82.



# FORM FILL SEAL in PLASTIC

*Single machine in Parisian cheese plant  
vacuum die-forms roll-fed polystyrene sheet,  
fills, then heat seals printed film cover  
in a 50-a-minute operation  
that suggests many food and non-food applications*

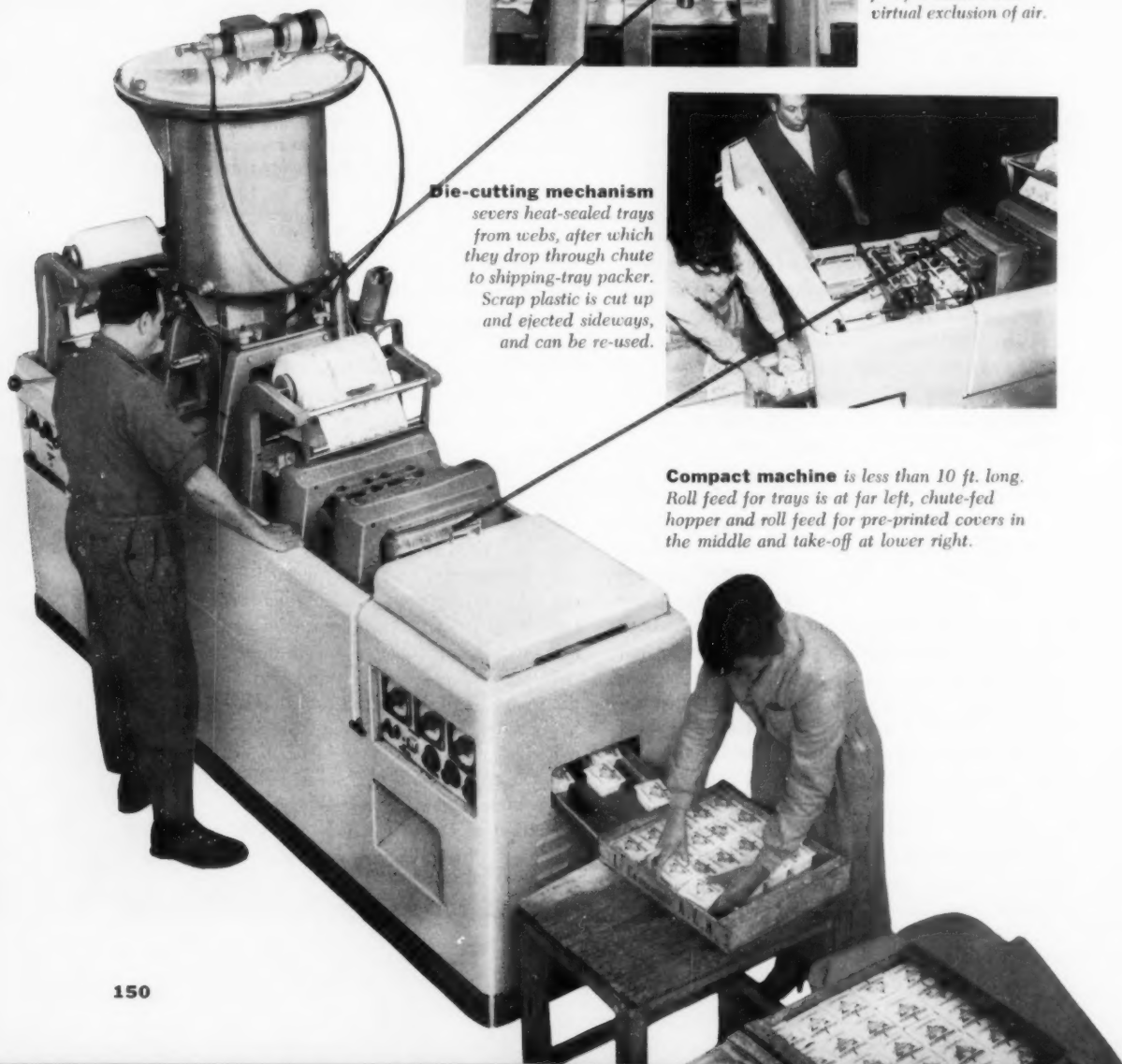


**Triple-head filler** deposits 6 1/3 oz. of cream cheese in each tray as web moves from former (left) to cover-film heat sealer (right). Domed fill of product permits tight fill of container and virtual exclusion of air.



**Die-cutting mechanism** severs heat-sealed trays from webs, after which they drop through chute to shipping-tray packer. Scrap plastic is cut up and ejected sideways, and can be re-used.

**Compact machine** is less than 10 ft. long. Roll feed for trays is at far left, chute-fed hopper and roll feed for pre-printed covers in the middle and take-off at lower right.





In a triumph of mechanical integration that combines container fabrication, filling and sealing in one high-speed machine less than 10 ft. long and only 29 in. wide, a Parisian cheese manufacturer is turning out as many as 3,000 filled and heat-sealed rigid polystyrene containers per hour.

This is the first commercial realization of a long-time goal in plastic packaging.

Basically, the machine employs vacuum, pressure or plug-assist techniques to form shallow or deep trays or cups in roll-fed plastic sheet. Product is fed from a filling head atop the machine and packages are automatically closed with heat-sealed polystyrene film, then cut apart from the web.

The product in this instance is cream cheese, but the potential applications cut across both food and non-food lines and include, to date, such varied products as jams, dried fruit, cake dressings, candy, unit coffee packs, hardware and household items. Several European packagers are said to be steadily developing new applications for the machine, which was introduced in the United States at last year's American Management Assn. National Packaging Show in Chicago.

Package cost for the cheese is 0.7 to 0.8 cents per unit, or three and a half to four times higher than the traditional wrap package formerly used. But the advantages over the former soft pack, including improved product protection and appearance, have convinced the packager that the added cost is a profitable investment. Moreover, the unprinted, translucent white, dish-like tray can be used for table service.

The packager is La Laiterie A.L.B. Chambourcy, Petit Clamart, Paris, which manufactures a variety of diet, salt and Swiss cheeses. Included are two leading brands of diet cheese, "Paris-Frais," a pasteurized type containing 30% fat, and "Super Ecrémé," containing no fat. Both are packed in the new container and, though intended for dieters, are now said to appeal in their new dress to non-dieters as well. The packager is currently installing a small battery of these new form-fill-seal machines to meet increasing demand.

Chambourcy's 6 1/3-oz. containers measure approximately 3 1/8 by 3 1/2 in. and are 1 3/8 in. deep, with a ribbed-wall thickness less than 1/64 in.

Here are the steps in Chambourcy's rapid conversion of two webs of polystyrene into three-across sealed containers:

1. Reel feed of 12-mil unprinted high-impact unplasticized polystyrene sheet.

2. Radiant heating at 266 to 284 deg. F. to pre-soften the web, leaving 3/8-in. strips of water-cooled sheet on each edge of the web for pulling through the machine by pneumatic cylinder.



**Polystyrene trays** of Chambourcy cream cheese are vacuum die formed of 12-mil, unprinted, high-impact sheet heat sealed with pre-printed 3-mil film, both roll fed. Interruption of the heat seal at the corners facilitates opening. Cover can be peeled off and the translucent white dish-like tray used at the dining table.

3. Vacuum die forming of rectangular cups with lip flanges.

4. Water cooling of cups.

5. Filling, three-up across the web.

6. Reel feed of pre-printed and registered 3-mil unplasticized polystyrene cover film (film is printed by the supplier).

7. Heat sealing of cover film to cup flanges in continuous sheet as cups pass underneath.

8. Die cutting of sealed containers from both webs, now heat sealed together.

9. Delivery of finished packages through chute to shipping-tray packer.

10. Draw off and guillot. [Continued on page 281]

SUPPLIES AND SERVICES: Model E-2 "Formseal" machine made by Hydro-Chemie, Ltd.'s Formac Div., Zurich, Switzerland, marketed in France by Laroche Frères s.a.r.l., Paris, and sold in the U.S. and Canada by Conapac Corp., 120 E. 13 St., New York 3.



# Double identity

*With Quality Chekd design,*

*121 independent dairies*

*keep local individuality*

*while drawing on strength*

*of association label*

*for effective competition*

*with regional and national brands*



**O**nce again the essential of a strong identifying trademark to win a vigorous sales edge over local, regional and national competition in the dairy industry is demonstrated by a package redesign program by members of the Quality Chekd Dairy Products Assn., with headquarters in La Grange, Ill.

The program—skillfully combining a powerful basic brand symbol with local “home-owned” dairy firm names—links visually 121 member companies in 35 states, totaling annual sales of more than \$150 million. Under the dual brand image for all items sold under the association banner, Quality Chekd products, the group believes, now are in a position to benefit to a maximum degree by a combination of a national name with a familiar local name.

Nucleus of the design, created by a design specialist, is a bold red check mark thrust down into the center of a letter “Q” to represent the association name. To gain maximum effectiveness from this symbol—subtly reminiscent of a target for added visual

**Heart of the imagery** is the trademark—a red check in a letter “Q” representing dairy-association name. White field serves as background for both local dairy signature and association symbol, so that eye sees both at once. Each strengthens the other.





impact—many of the individual dairy logotypes were redesigned to complement and strengthen the relationship between the new Quality Chekd trademark and the member-dairy signatures.

"The new symbol enables us to reach another goal in our organization by bringing individual dairies and the association's 'check of quality' closer together, so that customers identify one with the other," says Harlie F. Zimmerman, managing director of the Quality Chekd Dairy Products Assn.

The instantly recognizable mark now appears on packages for 14 milk products, four distinct ice-cream categories, orange juice, orange drink, egg nog, sour cream, cottage cheese and butter. The program also includes new tie-in color styling and insignia for 10 truck styles, ranging from tankers to small home-delivery vans.

Despite a very healthy sales position, it was the consensus of association members that previous Quality Chekd package designs—and other association graphics—were lacking in appetite appeal and in quality projection.

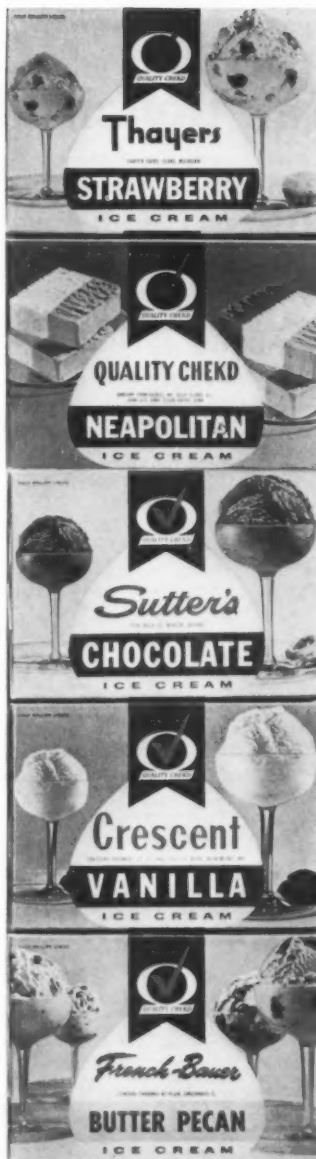
Also damaging to Quality Chekd's old dual identity were certain former local-brand signatures that had an inferior, "imprinted" look, it was felt.

The redesign project was launched to accomplish the following announced objectives: (1) improve an already sunny sales picture, (2) attract even more members to the Quality Chekd Assn., (3) spark and maintain high enthusiasm among present members, (4) provide a compelling Quality Chekd image for national advertising and merchandising and (5) strengthen the "home-owned" character of Quality Chekd dairy-products packaging.

The new designs achieve these goals, association officials believe. The "imprinted" appearance has been overcome by placing the local dairy signature in a white field which serves as an integral part of the design structure, also containing the Quality Chekd trademark. The eye sees both at once—thus, neither competes with the other and each strengthens the other, say the designers.

A quick glance at the new Quality Chekd packages shows how they attain positive identity whether seen in the depths of the supermarket refrigerator case, on the check-out counter with the shopper's other purchases, or in the home. [Continued on page 293]

**SUPPLIES AND SERVICES:** Design by Walter Landor & Associates, Pier 5 North, San Francisco. Ice-cream cartons by American Can's Marathon Div., Menasha, Wis. Milk cartons by International Paper, 220 E. 42 St., New York 17; Dairypak Butler, Olmstead Falls, O., and American Can, 100 Park Ave., New York 17. Cottage-cheese tubs by Lily-Tulip Cup, 122 E. 42 St., New York 17, and American Can's Dixie Cup Div., Easton, Pa.



**Illustrations and color styling** with bold flavor legends on ice-cream cartons make selection easy, whet the appetite.

**Multiple-size packaging** was studied carefully to provide design effective on all, as illustrated by these three sizes of cottage-cheese containers.





# Polyester pouch for pigments

*Economical film pack for paint colorants is achieved by Bennett's with modified form-fill-seal machines that provide close fill tolerances and packaging flexibility*



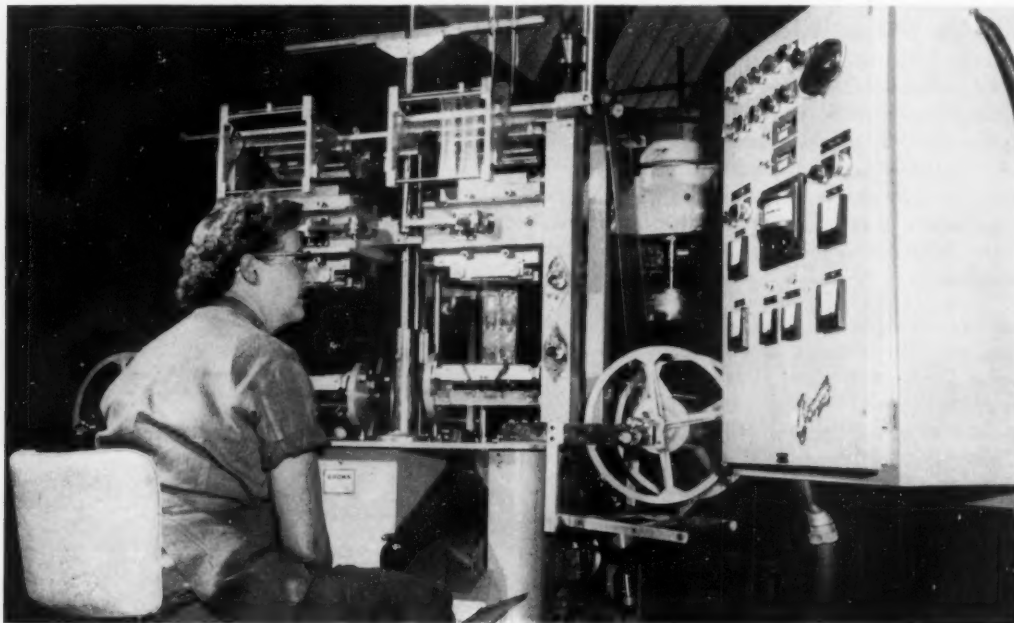
**Economical pouch** for paint pigments provides visual color identity, easy opening and use. Rounded inside corners facilitate complete removal of contents. Polyester protects product for three-year shelf life.

**S**harper control of problems in the pouch packaging of highly viscous liquids is seen in the development of a low-cost, transparent, polyester film package for paint colorants by Bennett's, Salt Lake City. The technique steps up filling accuracy, improves heat sealing and creates a container which Bennett's finds lighter, tougher and easier to store than conventional metal tubes.

With ingenious modifications of a standard pouch former-filler-sealer and installation of pre-printing equipment, Bennett's has:

1. Achieved a 10% saving in packaging cost that has offset a recent corresponding rise in the price of raw-paint ingredients.
2. Gained a compact packaging line capable of three to four times the company's previous output of the product in metal tubes and this higher speed of operation may result in further production-cost

**Modified unit packer** is equipped with new tubes and fittings, fill nozzles, special pump and cooling bars (following heat sealer) to control accuracy of fill within 0.5% and prevent heavy pigments from sagging through hot heat seals. Pouches are formed "four up" from two pre-printed webs.





savings after the run-in period, Bennett's believes.

Wide variations in density among Bennett's 16 pigment products and stringent requirements for filling accuracy to insure true colors in the final mixed paint posed five problems in machine design and package construction:

1. The machine had to be capable of swift adjustment among the five different pouch sizes used, which range from 1/4- to 4-oz. capacity.

2. Filling accuracy had to be held within 0.5% by volume, regardless of differences in viscosity.

3. The package had to be ruptureproof and had to resist chemical action of the product and its hydrocarbon vehicles over a three-year shelf life.

4. The heat-sealed edges of the pouch had to resist considerable hydraulic pressure, particularly while still hot from the sealing operation.

5. The pouch had to offer easy and complete dispensing of the product from the package during the mixing of paints at retail.

The coated polyester film selected for the new packages reportedly meets all requirements of strength, inertness and shelf life. Easy opening and complete dispensing have been assured by elimination of any sharp internal corners in the pouch—substituting gentle curves that will not hold back any pigment. Slots cut into the top of the pouch permit easy tear opening of the tough film. The product is squeezed from the package through a dispensing channel formed by the heat-seal bar.

**Standard cartoner** sets up locking cartons, which are hand filled with six pouches. Metal tubes previously used were individually cartoned.



Flexibility of the package is said to increase ease of use, while the transparency of the film permits a visual check on color and any residue of pigment in the package. The completed package is reported to be more than 10% lighter and 25% smaller than the previous containers.

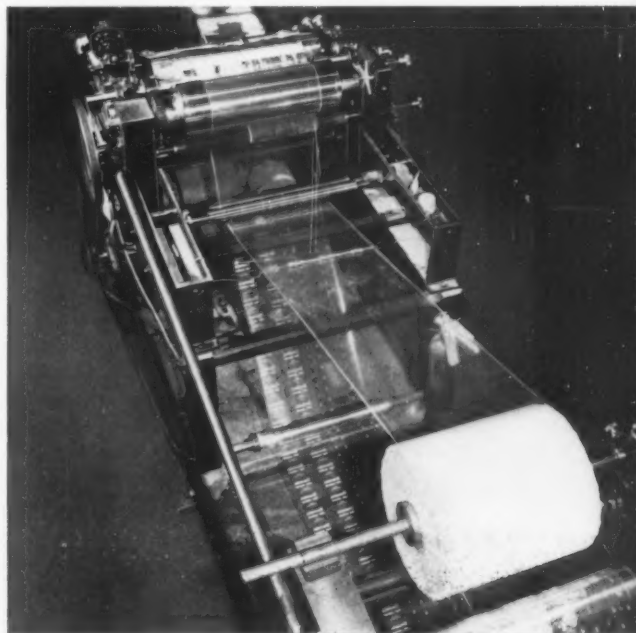
To solve the mechanical problems, several changes were made in the pumping and sealing section of two standard unit packagers, which have a combined rated output up to 200 pouches per minute.

Because of the products' high viscosity, the original connections and tubes leading from the pumping mechanisms to the filling nozzles were found to be too small, creating back pressure against the pumps and inaccuracies in fill. Successive increases were made in line diameters until one was found that permits free flow of the product.

Several different types of filling nozzles were designed and built by Bennett's to prevent dripping and "string-out" of the product when filling action is cut off. Nozzles are [Continued on page 311]

**SUPPLIES AND SERVICES:** Coated "Scotchpak" polyester film by Minnesota Mining & Mfg. Co., St. Paul 6. Pouch form-fill-seal machine by Brown Filling Machine Co., Sub. of Sundstrand Corp., Ann Arbor, Mich. Flexographic press by Wolverine Paper Converting Machinery Corp., 18584 Fitzpatrick Ave., Detroit 28. Marking machine by Markem Machine Co., Keene 11, N.H. Carton machine by Kliklok Corp., 405 Lexington Ave., New York 17.

**Flexographic press** in plant pre-presses polyester film for volume products. Single color is used for face design and repeat pattern of code marks for back of pouch.







**Not canned peas or beans, but panties and bras in cans stocked on supermarket shelves the same as groceries.** New soft-goods packaging is an approach to a long-time problem of handling without special fixturing. Success of idea would be a surprising setback for accepted doctrine that clothing needs transparent packaging. Concolute paper containers are 5 in. high and  $3\frac{3}{8}$  in. in diameter, with formed paperboard ends sealed on and a wrap-around paper label illustrating and giving full details of product.

## Canned apparel:



**W**hen it was revealed a year ago that Penn Fruit Co., big Philadelphia supermarket chain, was selling "canned" brassieres, panties and socks—canned in paper canisters and sold right off the shelf like oatmeal—the idea seemed interesting for its novelty but probably worth no more than passing interest.

But the sales results in this test made the garment industry sit up and take notice.

Right now nine garment manufacturers are marketing their products in opaque convolute paper containers of this same type. The Fred Meyer supermarket chain has the packages on sale in the Northwest and Colonial Stores have introduced them in seven districts in the Southeast and Midwest.

The manufacturer of paper cans behind the idea is so assured of volume acceptance that this firm has already set up a Brooklyn plant for manufacture of the cans to serve New York's vast garment industry.

The reason? The new packaging is an approach to a long-time problem in supermarkets, because it offers a way for apparel to be warehoused, distributed, price marked, stacked on the shelves and sold with the same facility as groceries. This package needs no special fixturing—as presently required for

most flexible packaging—to get moved around, old, broken and ultimately shoved off the floor. It simply goes on the shelves—fixtures which every supermarket in the country has.

The implications are tremendous. With no special fixturing or arrangements necessary, supermarkets could purchase packaged apparel direct from the manufacturer and simply stock it on the shelves themselves, thereby effecting economies by eliminating the middleman—the rack merchandiser.

Success of the idea, too, would be a surprising setback for accepted doctrine that clothing items of this type must have at least a transparent package and preferably one that permits handling of the garment. The paper canister is not only opaque, but sealed. The latter point is regarded by most stores as an asset. Supermarkets now selling canned apparel report that the incidence of tampering and pilfering has been reduced substantially.

Successful previous experience with opaque picture cartons for brassieres, showing spectacular sales increases, was an early indication that product visibility may not always be necessary to sell soft goods. Colorful billboard-type labels, as used on the



## will it take?

*Supermarket test success  
of the standard, opaque, sealed paper canister  
has nine garment manufacturers  
now using it for everything  
from bras to petticoats—and the stores like it*

canisters, enable shoppers to identify an article quickly, making shopping effortless.

In the five-week test in four Penn Fruit Co. supermarkets, where four items were sold for the first time last year in the sealed, round, opaque, rigid paper containers, given equal space and display alongside film packages, the canned soft goods outsold the others by better than two to one, according to the package supplier, accounting for 67% of all dollar sales of the four clothing items and 70.8% of unit sales.\* And the canned articles led to increased sales on a dollar basis, registering sales 30% above normal for the test items that were packaged in other types of containers.

\*See "Soft Goods Test," MODERN PACKAGING, May, 1959, p. 166.

Although Penn Fruit did not continue selling the canned soft goods after the test, this firm was reported in *Supermarket News* as believing "packaging of this kind should go a long way toward helping supermarkets to sell more soft goods, once consumers have been educated to accept it," but felt that this type of container "is more suitable at present for food retailers with only a minimum of facilities for merchandising soft goods."

The man credited with launching the idea is an ex-Gimbel soft-goods merchandiser who later went into leased apparel departments in supermarkets. His feeling that present soft-goods packaging for these outlets was inadequate led to a study of new packaging forms that would better fit the supermarket



**Items large as slips** and half slips are simply rolled up and comfortably placed in canisters. They need no slip sheeting or equipment for loading.

**Opening is easy** by placing thumbs below the cover and pressing, at points indicated on the label, to break seal and lift off cover.







**Packaging operation** in typical apparel plant starts with hand-filled containers which are transferred to gluing unit that applies adhesive around rim to seal top lid of canister.

requirements. Experience with metal cans for nylon hosiery and alarm clocks in supermarkets gave further indication that a sealed, opaque, food-type package would be accepted.

Only about one-fifth of the nation's supermarkets now have soft-goods sections. One can-sales manager believes the new canister package has a potential immediate distribution in all 29,000 major supermarkets and in 99,000 voluntary and cooperative stores—simply because it fits right on the shelves.

The cylindrical package, looking something like the long-familiar salt and oatmeal packages, is an opaque, rigid, convolute paper container, 5 in. high and  $3\frac{1}{8}$  in. in diameter, with formed paperboard ends that are sealed on and a wrap-around printed paper label. So far, only one size has been adopted, but containers of greater height have been suggested for items too bulky for the smaller size. For still larger items—such as shirts, pajamas, slacks, housedresses, etc.—sealed, slick-coated, full-color-printed, rectangular folding boxes, similar to cereal cartons, are being suggested.

Cost has nothing to do with it. Actually, cost of the paper can appears to be slightly higher than that of a good, printed film package. But, apparel manufacturers see in it the possibility of building greater volume through wider distribution. They also say cost may be offset by simplified handling on the production line. Items are simply folded, rolled up and placed in the cans before lids are sealed on. No equipment or extra labor is required for slip sheeting or to inflate bags and place items over a mandrel to load them. Automatic loading machines, of course, where they can be used, will greatly reduce the cost of bag packaging.

The paper cans are supplied to the garment plant with already-applied, printed, wrap-around labels and bottoms glued on. Covers are supplied slipped over the glued-on bottoms. When the containers go to the packaging line in a typical apparel plant, they are first loaded, then travel past a gluing unit which applies an adhesive around the top rim, ready to

receive the lid which is simply slipped off the bottom and placed on the top of the canister, over the adhesive, to complete the seal.

Opening by the consumer after purchase is easy. Placing both thumbs below the cover and pressing, at points that are indicated on the label, breaks the seal and the cover lifts off.

The apparel firms who are trying out this new container form now use it for women's panties and bras, children's briefs and socks, women's stretch tights, slippers, full slips, cotton and nylon petticoats, girdles and sports briefs. And due to appear soon in paper cans are: *For women*—hosiery, belts, sweaters, knit gloves, mittens, garter belts, scarves, anklets, raincoats and aprons. *For men*—socks, polo shirts, work gloves, knit gloves and mittens, handkerchiefs and rainwear. *For children*—sweaters, belts, blouses, T-shirts, headwear, knit gloves, mittens, scarves, smocks, diapers and infants' creepers.

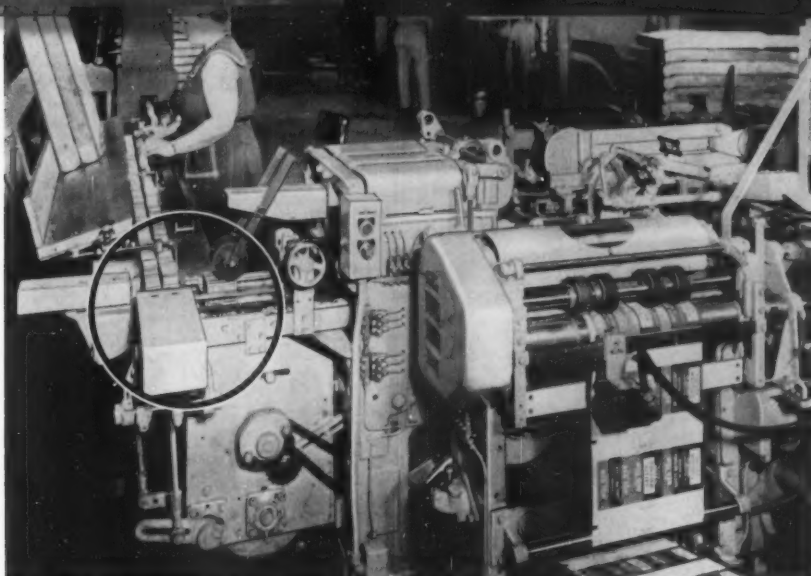
Possibilities for application of the paper canister for products used in the home are: towels, washcloths, pillow cases and other flat goods.

Aside from easy handling, supermarkets are impressed with the potential space saving offered by the paper cans. In an area 72 in. long containing four 16-in.-high shelves and averaging from  $14\frac{1}{2}$  to 24 in. deep, it is reportedly possible to stock 1,452 standard 5-in. cans of apparel. On pegboards, because of wasted area, it is estimated that it is possible to stock in similar store space only 720 peg-hanging packages,  $4\frac{1}{2}$  by  $8\frac{1}{4}$  by  $\frac{3}{4}$  in. in size, each peg holding 12 hang-up packages.

Although the garment manufacturers who have adopted the new package say it will be several months before they have conclusive sales results, the consensus is that the paper can—if cost is kept in line—will lend itself to chain-wide supermarkets and should provide the solution to many problems in merchandising soft goods in food stores.

**SUPPLIES AND SERVICES:** Paper canisters developed and supplied by American Can Co., 100 Park Ave., New York 17.





**First step** is high-speed assembly of penny match boxes in bundles of 10, started by ram device (circle) that groups boxes. Wrapping section (right) applies and glues printed kraft paper. Technique is an adaptation of fractional cracker packaging.

## Twin bundle

*Diamond National Corp.*

*cuts labor 50%, speeds bulk assembly of penny match boxes by modifying tandem wrappers to group both distributor and retail units*

**A** packaging bottleneck in the high-speed collection of penny match boxes for final casing has been broken at the Diamond National Corp.'s Cloquet, Minn., plant with the development of a double bundling technique adapted from the fractional packaging of crackers.

In addition to a 50% reduction in hand labor, the combination of automatic bundling operations and new conveyor transfers speeds up the final casing operation to match the 700-unit-per-minute rate of the match-boxing lines and so integrates the entire packaging procedure. Performed in two stages, successive overwrapping in printed kraft paper enables the penny boxes to be combined in 10-box primary groups and then in 12-package groups to meet marketing needs of both distributors and retailers.

Ten specially modified machines are used to collect the filled penny match boxes and overwrap them in either a single row of 10 or two rows of five boxes at 70 boxes per machine per minute. Because the rectangular match boxes are similar to crackers in

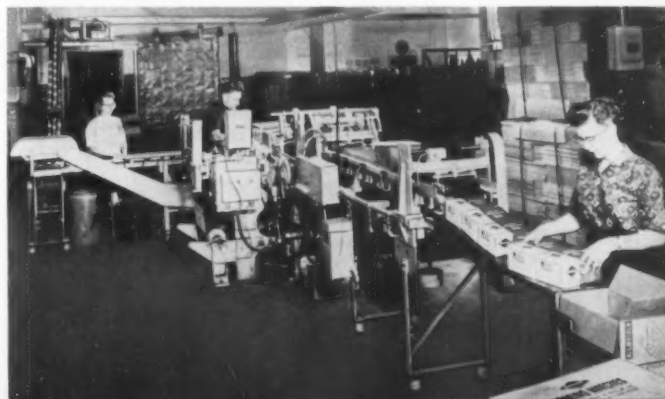
handling, the high-speed equipment used for the latter was easily modified to separate unbroken lines of boxes into groups of 10. Conventional electric-eye registration and cut-off are used for the paper web, with plow folders doing the wrapping. For sealing, glue rolls replace heat sealers employed for film-wrapped cracker packages.

Two other bundlers, operating on the same principle, are used to collect the output of six primary wrapping machines and combine 12 packages into each final bundle. The primary bundles are conveyed between wrapping operations on fast overhead conveyor lines. The final packages are immediately loaded by hand into corrugated shippers.

Where small rectangular containers must be handled in bulk, and distributed and sold in various units, this double-wrapping technique provides a low-cost answer to the problem of speedy assembly.

**SUPPLIES AND SERVICES:** Model 49M bundlers by Battle Creek Packaging Machines, Battle Creek, Mich.

**Final bundling** to group 12 primary bundles of penny boxes is accomplished on a similar machine fed from high-speed overhead conveyor. Completed packages are hand cased (right).





# Showdown in Washington

*With time running out on the Food Additives Amendment and clearance machinery bogged down, packagers look to Congress for action to postpone enforcement of the law*

**W**ith the deadline for compliance with the new Food Additives Amendment only days away as this issue went to press, the expectation was growing in Washington that food packaging would be rescued, at the last moment, from what seemed an impossible dilemma, probably by action in Congress to place a blanket moratorium on the law, so far as "incidental additives" are concerned, for one or two years. A possible alternative would be some action by F&DA toward the same end.

Groups representing certain packaging interests were reported to have a moratorium bill drafted and to be awaiting only the progress of hearings in the House Interstate & Foreign Commerce Committee before introducing it. The hearings were expected to bring out the impossibility of breaking the clearance log-jam in the Food & Drug Administration before the March 6 deadline set by the 1958 amendment and the danger that arbitrary outlawing of vital packaging materials on that date would seriously disrupt the nation's food supply.

This was the prospect despite the fact that there finally was published in the *Federal Register*, on Feb. 2, a "white list" of 84 chemicals commonly used in packaging which were declared safe on the basis of prior sanctions. The list appears on the opposite page. This was the first specific listing of cleared packaging ingredients since the amendment was enacted 17 months ago and packagers were left in the dark as to the status of hundreds of other materials, including widely used plastics, not identifiable with the list. At least one other packaging chemical—nitrous oxide gas, used as a propellant in food aerosols—is proposed for clearance in an additional list of 51 chemical additives also published in the *Federal Register* of Feb. 2.

The paper and paperboard industries were hoping for blanket clearance or extension. The American Pulp & Paper Assn. and the National Paperboard Assn. jointly petitioned F&DA early in February with two lists of pulps and chemicals, one list of chemicals only and a fourth list of re-use fibres divided into seven categories. Clearance was re-

quested on the first three lists and a time extension for testing was requested on the fourth list.

Under the amendment, as previously pointed out in this magazine (*May-June-July, '59*), any packaged foods shipped in interstate commerce which contain in their packages chemicals which may migrate to the food, and which chemicals have not been established as "safe" in the amounts absorbed by the food, may, after March 5, 1960, be seized and destroyed and the packagers subjected to civil and criminal penalties. Warranties by package suppliers will not necessarily protect the packager; the responsibility is specifically on the packager.

Publicly, the F&DA appeared in no mood to compromise and was insisting, in the House hearings, that the timetable originally set by the law could and should be enforced. But privately, the interests backing the moratorium idea were said to have been assured that their bill would receive prompt and sympathetic consideration, at the right time.

To Washington observers, this outcome seemed all the more likely in view of the several deficiencies of the present law which F&DA was itself busily pointing out during the House hearings started Jan. 25. The hearings quickly broadened into a review of the entire Food, Drug & Cosmetic Act, to which the 1958 act involving packaging materials was merely an amendment. The following three points were immediately established:

1. That F&DA wants Congress to get rid of the "grandfather clause" in the basic Food, Drug & Cosmetic Law, under which a sanction, once given, cannot be withdrawn without a long and laborious procedure, with the burden of proof on F&DA. This clause also governs approvals of packaging ingredients under the new amendment and explains the cautiousness with which F&DA has been moving in this new area of sanctions. F&DA could move much faster if it had the right to approve additives on a tentative basis, subject to new evidence.

2. That F&DA has reversed its position on the controversial Delaney Clause in the Food Additives Amendment, which flatly bars cancer-causing chemi-



## SOME CHEMICALS APPROVED BY F&DA FOR USE IN FOOD PACKAGING

(List appearing in the Federal Register of Feb. 2, 1960)

The following F&DA "white list," devoted mainly to chemical modifiers commonly used in plastics, films and coatings, is largely a re-affirmation of approvals given in F&DA lists published prior to the Food Additives Amendment of 1958, with the tolerance limits having been added in some cases.

The fact that some chemicals which were previously listed do not appear here does not necessarily mean that they will not be approved or permitted. The categories of resins, films and pigments, appearing in previous lists, have been omitted; it is expected that they will be covered later.—Ed.

### Antioxidants (limit of addition to food, 0.005%)

Butylated hydroxyanisole  
Butylated hydroxytoluene  
Dilauryl thiodipropionate  
Distearyl thiodipropionate  
Gum guaiac  
Nordihydroguaiaretic acid  
Propyl gallate  
Thiodipropionic acid  
2,4,5-Trihydroxy butyphenone

### Antimycotics

Calcium propionate  
Methylparaben  
(methyl *p*-hydroxybenzoate)  
Propylparaben  
(propyl *p*-hydroxybenzoate)  
Sodium benzoate  
Sodium propionate  
Sorbic acid

### Driers

Cobalt caprylate  
Cobalt linoleate  
Cobalt naphthenate  
Cobalt tallate  
Iron caprylate  
Iron linoleate  
Iron naphthenate  
Iron tallate  
Manganese caprylate  
Manganese linoleate  
Manganese naphthenate  
Manganese tallate

### Drying oils (as components of finished resins)

Chinawood oil (tung oil)  
Dehydrated castor oil

Linseed oil  
Tall oil

### Plasticizers

Acetyl tributyl citrate  
Acetyl triethyl citrate  
*p*-tert-Butylphenyl salicylate  
Butyl stearate  
Butylphthalyl butyl glycolate  
Dibutyl sebacate  
Diethyl phthalate  
Diisobutyl adipate  
Diisooctyl phthalate (for foods of high water content only)  
Diphenyl-2-ethylhexyl phosphate  
di-(2-Ethylhexyl) phthalate (for foods of high water content only)  
Epoxidized soybean oil (iodine number maximum 6; and oxirane oxygen, minimum, 6.0%)  
Ethylphthalyl ethyl glycolate  
Glycerol monooleate  
Monoisopropyl citrate  
Mono, di- and tristearyl citrate  
Triacetin (glycerol triacetate)  
Triethyl citrate  
3-(2-Xenoyl)-1,2-epoxypropane

### Release agents

Dimethylpolysiloxane (substantially free from hydrolyzable chloride and alkoxy groups, no more than 18% loss in weight after heating 4 hrs. at 200 deg. C.; viscosity 300 centistokes, 600 centistokes at 25 deg. C., specific gravity 0.96 to 0.97 at 25 deg. C., refractive index 1.400 to 1.404 at 25 deg. C.)  
Linoleamide (linoleic acid amide)  
Oleamide (oleic acid amide)  
Palmitamide (palmitic acid amide)

Polyethylene glycol 400  
Polyethylene glycol 1500  
Polyethylene glycol 4000  
Stearamide (stearic acid amide)

### Stabilizers

Aluminum mono-, di- and tristearate  
Ammonium citrate  
Ammonium potassium hydrogen phosphate  
Calcium acetate  
Calcium carbonate  
Calcium glycerophosphate  
Calcium phosphate  
Calcium hydrogen phosphate  
Calcium oleate  
Calcium ricinoleate  
Calcium stearate  
Disodium hydrogen phosphate  
Magnesium glycerophosphate  
Magnesium stearate  
Magnesium phosphate  
Magnesium hydrogen phosphate  
Mono-, di- and trisodium citrate  
Mono-, di- and tripotassium citrate  
\* Potassium oleate  
\* Potassium stearate  
Sodium pyrophosphate  
\* Sodium stearate  
Sodium tetrapyrophosphate  
Tin stearate (not to exceed 50 parts per million tin as a migrant in finished food)  
Zinc orthophosphate (not to exceed 50 parts per million zinc as a migrant in finished food)  
Zinc resinate (not to exceed 50 parts per million zinc as a migrant in finished food)

\* Added since 1955 list.

cals in any amount. (Other chemicals may have tolerable limits.) F&DA opposed this clause in the original hearings, but has decided—on the basis of new data from the National Cancer Institute—that it is impractical at this time to set tolerances for carcinogens. It wants not only to keep the clause, but also to apply it to drugs and cosmetics.

3. That F&DA now wants new and broader legislation—similar to the additives amendment—to con-

trol the use of colors in both food and cosmetics, and to put the burden of proof of their safety directly on manufacturers of the products.

In the opinion of most observers, this adds up to a need for study and possible revision not only of the Food Additives Amendment, but of the basic Food, Drug & Cosmetic Act. Obviously, this couldn't possibly be accomplished by March 6.

The importance which [Continued on page 315]



## Ready-to-bake coffee ring in a fibre can



A ready-to-bake coffee ring in a metal-end foil-laminated fibre can, including individual film-pouch packages of glaze and frosting, is The Borden Co.'s latest entry in the growing field of convenience bakery products. The cylindrical, spiral-wound can is similar to that used for packaging ready-to-bake biscuits. It is opened by stripping off the outer foil label and twisting the container ends in opposite directions. An unadhered lift-up extension of the label facilitates its removal. This yellow-colored "tab" is printed with directions for tear-off.

Packed inside the can with the coffee-ring mixture are two metalized-polyester film pouches. One contains glaze which is spread over the product before baking it; the other contains frosting which is applied to the cake after baking. The protective pouches serve as dispensers as well as containers. After cutting open one corner of each pouch, contents can be squeezed out for controlled application to the cake. *Fibre can by Memphis Can Co., 1420 Regan St., Memphis, Tenn. Foil label by Milprint, 4200 N. Holton St., Milwaukee 1. "Scotchpak" metalized-polyester film by Minnesota Mining & Mfg., 900 Bush Ave., St. Paul 6.*

# IDEAS

## Smith Brothers goes to polyethylene bottles



A famous name in cough medicines joins the swing to plastic bottles. Marking another product-field breakthrough for an increasingly more economical type of container (see "Big Push on Plastics," MODERN PACKAGING, Oct., 1959, p. 109), Smith Brothers has adopted a blow-molded polyethylene squeeze bottle for liquid Medicated Cough Concentrate. The new non-prescription product is now being test marketed.

Made of low-density polyethylene, the container achieves impermeability via a specially developed interior polymeric lining. The lining solves a problem of flavor loss experienced with unlined test containers, says the packager. Other advantages reported for the red-colored squeeze bottle are that it is lightweight (for shipping economies), easy to grip, virtually unbreakable and convenient to use. A plug-type polyethylene dispenser fitment simplifies control of product flow. The plastic-bottled liquid is marketed in a die-cut paperboard merchandiser, along with a small polyethylene flask that can be filled with a supply of the product and carried in pocket or purse for use away from home. *Polyethylene containers by Plax Corp., Hartford, Conn. Counter merchandiser by New Haven Board & Carton, New Haven 8.*



## Gerber seen with reclosable lug caps

The determined efforts baby-food manufacturers are making to meet constant consumer requests for containers that are more convenient to handle and easier to open and reclose is indicated by new Gerber packages that can be purchased in Chicago markets.

The new squat, wide-mouth jar is equipped with a twisting lug cap, replacing the familiar pry-up vacuum cap. Although Gerber is mum on the subject, it is no secret that all baby-food manufacturers are trying out reclosable caps and eventually hope to develop a satisfactory tamperproof seal so that there is no danger of the vacuum being broken before use. And it is also no secret that baby-food processors are keeping close watch over all test markets where reclosable caps are being sold to see that no jar is opened and reclosed on the shelf.

In the Chicago area six Gerber baby-food items have been seen on sale in jars with the reclosable twist caps. Supplies and services—(as revealed by registered trade name on the cap and mold mark on the jars): *Caps by White Cap Co., Sub. Continental Can Co., 1819 N. Major Ave., Chicago 39. Jars by Owens-Illinois, Toledo 1.*



# IN ACTION

## Carton design ties in with national ads

In a full-scale package-redesign program for cosmetic creams and lotions, aimed at greater appeal on retail shelves and in the boudoir, Tussy Cosmetics achieves both a departure from traditional industry approach and a close visual tie-in with national advertising. Redesign was accomplished by Tussy's Seymour Kent, working with the firm's designer.

Opal glass jars (for creams) and flint bottles (for lotions) have been restyled for a more distinctive "apothecary-container" appearance. Gleaming foil labels are calculated to enhance this appeal. Side-panel design on retail cartons simulates in miniature the packager's national magazine advertisements. The company's "Tussy Girl" is reproduced in a 10-color process on opposite panels; another panel contains promotional copy in the same type face used for national ads. *Redesign by Design Associates, 1 E. 53 St., New York. Cartons by Container Corp. of America, 38 S. Dearborn St., Chicago 3. Bottles by Carr-Lowrey, 2201 Kloman St., Baltimore 30, using Mack Molding urea caps. Jars by Wheaton Glass, Millville, N.J., using Crown Cork & Seal coated metal caps. Foil labels by Richard M. Krause, Inc., 52 E. 19 St., New York 3.*





## Exact count by electronics

*Costly overfilling is eliminated at Harper's by new counter-filler that slows its action near the end for accuracy; savings justify a step-up in quality and function of boxes, now color coded*

**T**hough still handicapped by relatively low packaging budgets in the face of wider diversification of products, packagers of industrial products are edging away from the humdrum in both methods and merchandising, and are moving closer to consumer packaging standards and techniques. A general upgrading of container design and container materials is clearly apparent today.

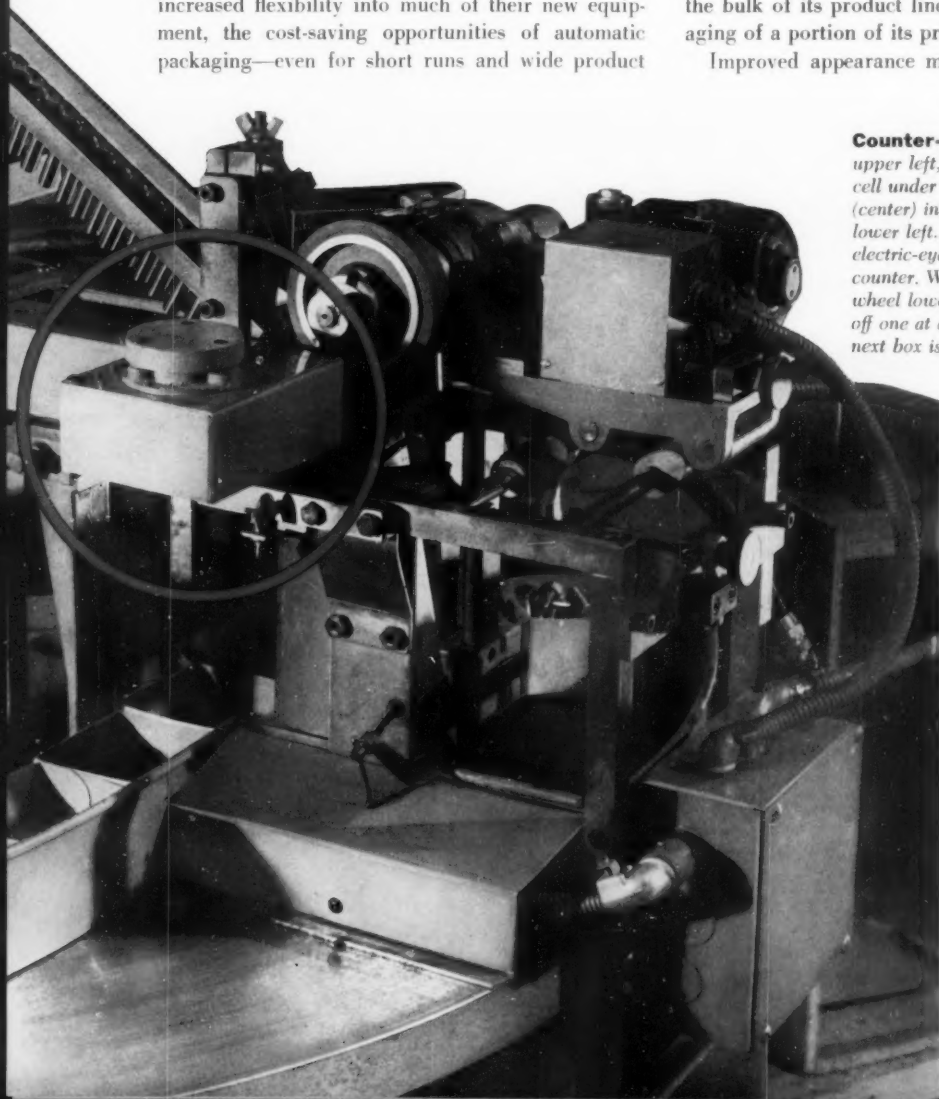
And as packaging-machinery manufacturers build increased flexibility into much of their new equipment, the cost-saving opportunities of automatic packaging—even for short runs and wide product

ranges—have now come within the reach of more and more industrial packagers.

Typical of industrial packagers showing increased concern with both appearance and greater mechanization is the H. M. Harper Co., Morton Grove, Ill. Harper produces some 7,000 types of non-corrosive industrial fasteners in 89 different alloys. The company has just completed a switch to attractive three-color labeling of telescoping paperboard boxes for the bulk of its product line and to automatic packaging of a portion of its production.

Improved appearance meant a 20% increase in

**Counter-filler** feeds fasteners from upper left, past boxed photo-electric cell under retractable clearing wheel (center) into empty boxes moving from lower left. As each bolt interrupts the electric-eye beam, it is registered on counter. When pre-set count is reached, wheel lowers to touch screws, counts off one at a time, then stops flow until next box is in position for filling.





package cost, but at the same time Harper installed its first automatic packaging machine and reduced packaging labor costs nearly 15%. The new machine is a versatile small-parts counter-filler with several noteworthy features. For extreme accuracy, computation is based on exact count rather than product weight. Yet high speeds are achieved by an interesting "trickle" control which allows the bulk of each box's contents to fill at top speed, then slows the flow just before final count is reached for an accurate cut-off. This is an adaptation of a principle which has been previously used in the weigh filling of such lightweight food products as potato chips and twist-wrapped candy.\*

While only about 15% of the company's production volume can be packaged on the new counter-filler, these are the Harper products—small screws, bolts and rivets—which were formerly most troublesome to package quickly and accurately.

The machine handles an unusually high range of box sizes, up to 4½ in. in width, 6 in. in length and 8 in. in height. This is a big advantage to

\* See "Saving Product, Saving Film," MODERN PACKAGING, Nov., 1958, p. 122.



**Single operator** fills hopper, feeds empty boxes into the turntable and puts lids on filled boxes. Compact machine occupies only 30 sq. ft. of floor space. Scale at left is for occasional spot check of weight. Labor cost is reported to be down 15%.

**Package upgrading** is clearly apparent in comparison of old boxes (lower left) with new. Drab all-over pattern has been replaced by bright golden-orange color, sharply defined logotype and a series of cartooned merchandising messages. Use of varicolored label stocks identifies metal content of product.







**Trickle flow** is controlled by this panel marked off in thousands, hundreds, tens and units. When filling gross boxes, black knobs are set for 144; white knobs for 139 or 140. Bulk of contents fills at top speed. Final four or five screws dribble in.

Harper, since product size range requires 16 different box sizes. The new machine handles eight of these sizes. Fast change-over is another benefit. Reportedly, most adjustments in product and box size can be effected in less than 10 minutes. Not only does the machine's economy of operation nearly offset the added cost of the improved packages, but its speed permits a reduction in packaged inventory without creating an irritating delay in filling orders.

#### Details of machine

For a long time Harper had been convinced that the size and shape variations and short runs of its thousands of products made automatic packaging equipment impractical. So, fasteners were scooped by hand into boxes and weighed. Being frequently admonished to guard against underweight, packaging personnel tended to err the other way. Harper found that filled boxes were averaging 2% overweight—a small amount in itself, yet one which cut painfully into the profit margin. Complex fasteners cost as much as five cents each.

The new counter has all but wiped out the overweight problem for the small products it handles. The machine takes all headed screws, bolts and rivets with shank diameters of from  $\frac{1}{8}$  in. to  $\frac{1}{2}$  in. and in nearly all lengths and head sizes. It fills up to 1,000 units per box. Depending on product size and shape, production ranges from five to 14 one-gross boxes a minute. And the machine is compact enough—only 5 ft. wide by 6 ft. long—to fit neatly into Harper's packaging-floor area without shifting labeling tables or storage units.

The only hand operations required for the new machine are the feeding of paperboard box bases onto the machine's turntable and loading of the

hopper-feeder. This hopper, large in proportion to the size of the machine, is shaped like an open concrete mixer, with spiral pockets around the inner circumference and a variable-speed drive. As the hopper revolves, screws bounce from the pockets into a channel between two feed tracks. They feed downward, heads up and shanks down, past a photo-electric cell and then through the filling spout into an open box waiting underneath. The light beam is broken by the slight separation between screws as they slide down the tracks. An individual impulse sent to the counter records one unit with each break made in the electric-eye beam.

The machine's "trickle flow" is its most unusual feature and is largely responsible for its accuracy. This flow is activated by a predetermined electronic impulse from the counter. Screws feed down the tracks at high speed until the set point for trickle flow is reached and a signal is flashed by the counter. A retractable clearing wheel then lowers to contact the row of screws. Turning slowly, it allows one screw at a time to drop until an exact count is achieved. At that point the wheel stops rotating and the flow of screws stops. The revolving table then moves the filled box out and, in the same motion, the next empty box is centered under the filling spout and the entire cycle is repeated.

Trickle flow can be set to start at a point from one to 10 before the desired final count. For top speed it is, of course, best to initiate trickle flow as close to the end of the count as possible while assuring accuracy. When filling gross boxes, a setting of 140 for fast fill is about right. Thus only four screws in each box are filled at the slow speed.

The trickle device is required because of the difference in action between the high-speed electronic control and the slower mechanical cut-off it activates. Thus, the photo-electric cell instantaneously ticks off the predetermined number of items, at which point it sets the retractable clearing wheel into motion. This slower-acting device is brought into play just in time to count off accurately the remaining few items to complete the load.

Jams are minimized by a set of high-pressure plastic laminate clearing wheels which revolve just above the mouth of the inclined feeding channel and brush out-of-line screws back into the hopper-feeder. If a foreign object too small to be picked up by the clearing wheels manages to get into the feeding channel, a vertical [Continued on page 293]

**SUPPLIES AND SERVICES:** "Beco" Model 628 exact-count package-filling machine by Batchelder Engineering Co., Springfield, Vt. Electronic counter by Machinery Electrification, Inc., Northboro, Mass. Telescoping Brightwood cartons by Yates Carton Co., Chicago 7. Labels by McIntosh Paper Co., Chicago 6.



## A better boil-in bag

*Sara Lee's first non-bakery product, frozen creamed chicken, incorporates six protection and convenience improvements in a film bag automatically loaded into a tamper-resistant, tuck-lock carton*

**F**or its initial entry in the growing list of boil-in-the-bag frozen-food products, Kitchens of Sara Lee, a Chicago producer famous for its cheese cake and other nationally distributed, premium-quality frozen baked goods, has chosen a polyester-polyethylene laminated bag with a significant number of patented refinements that add up to improved product protection and more consumer convenience. Its new main-course pre-cooked item, "Chicken Sara Lee," is further enclosed in a high-gloss waxed, printed carton with a new and improved tamper-resistant lock. Already introduced in East and Gulf Coast markets, this chicken entree is expected to be the forerunner for other frozen meat and poultry dishes to be marketed by Sara Lee.

The new bag has an inner wall of the usual 0.0020-in. polyethylene film laminated to an outer layer of 0.0005-in. polyester film. However, six special features of the improved bag are noteworthy:

1. At the top of the bag, above the heat seal, a

**Tamper-resistant tuck lock** is secured by means of long curved slit on main flap and "wings" at sides of flange on edge of carton body. Closed side of carton (right) shows how little this lock construction interferes with merchandising messages.



**Horizontal slot** is provided at top of film bag for easy removal from pan. Sara Lee has reduced size of top flap, increased size of bottom flap compared with other boil bags on the market, for more user convenience.





**Hand feeding** of product conveyor compartments is only manual operation needed for cartoner, which runs at average of 85 units per minute. Blanks feed from vertical magazine onto carton conveyor, which is synchronized with product conveyor.

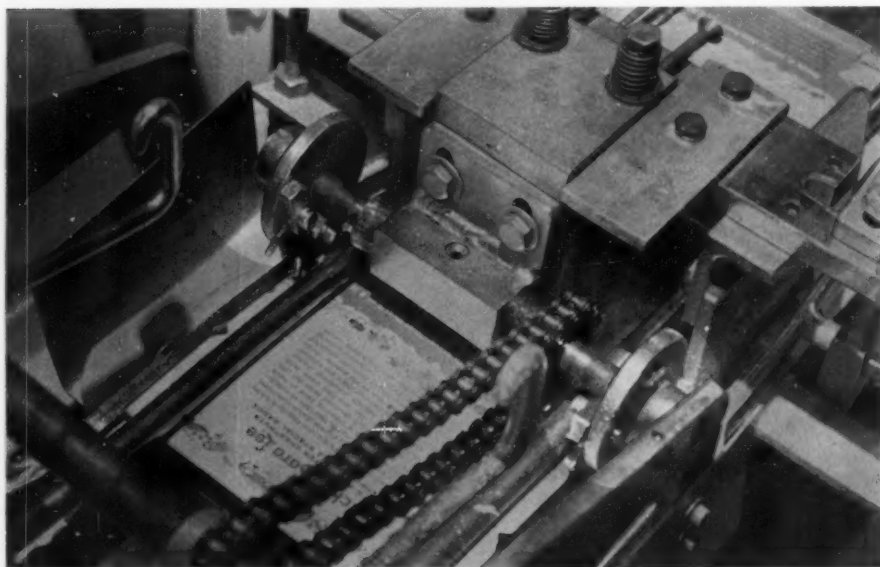
horizontal slot ( $1\frac{3}{4}$  in. long by  $\frac{1}{4}$  in. high) allows the cook to insert a fork or spoon to lift the bag easily from boiling water without scalding her fingers or puncturing the bag.

2. To eliminate a common complaint against boil-in bags—water retained in the top flap which sloshes onto the plate when the bag is inverted for serving—Sara Lee has pared the size of the top flap to a minimum. It extends less than 2 in. above the filling area of the bag.

3. The bag has a larger-than-usual bottom flap so that the consumer can get a firm, burn-free grip when she is emptying the contents.

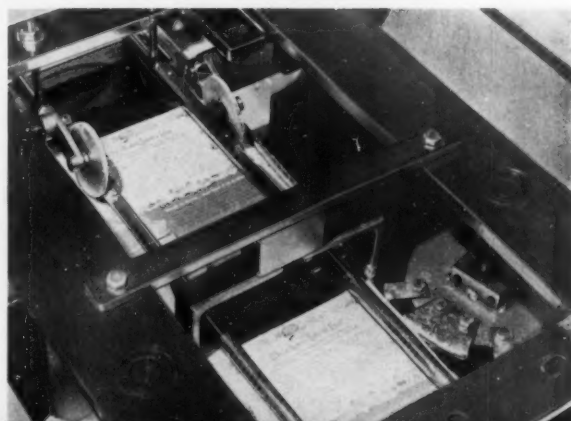
4. Die-cut notches on both sides aid opening and are clearly indicated by red arrows.

5. Heating and serving directions are printed on the bag itself. This red printing is sandwiched between the laminated films so that ink does not discolor the cooking water. This is considered psychologically important even though most women are accustomed to it from years of heating frankfurters.



**Spiked wheels** (circled) nudge "wings" of carton-body flange slightly downward, preparing them for anchor lock. The machine is shown here with its protective hood removed.

**Lock-flap positioning wheels** (upper left) facilitate entry of flange into curved slit on flap. Then cam wheel (lower right) gives a final thrust to anchor the lock and side slit locks as cartons move toward lower right.





6. Three bands of heat sealing are provided above the opening line. With any viscous product containing fat, there is always a chance of slight seepage into the sealing area, usually resulting in a defective seal. Sara Lee finds that its three bands of heat sealing, separated from each other by narrow air bands, insure a positive seal for the package. If a small amount of the product should ooze into the first heat seal, it is contained by the second and third heat-seal bands made in the container.

Sara Lee prefers to use a fairly large bag—6¾ by 6 in. over-all before filling—because, paradoxically, it allows the use of a smaller carton. The product, reportedly, would tend to bunch irregularly if it were packaged in a smaller bag.

#### Carton improvements

The most notable aspect of Sara Lee's carton is a new anchor tuck lock which gives extreme tamper resistance. Based on a series of die-cut curves rather than angles, the carton culminated many months of research by the supplier.

The Sara Lee carton has only one full-width flap on either end. Ends of the flap are rounded. At the center is a long curved slit with a tiny circular indentation at each end. These circles are depressed on the outside, raised on the inside. As the flap is mechanically tucked, a curved flange on the opposite side of the carton is forced into the curved slit on the flap. The flange has small flaps or wings at each end. After tucking, the tiny raised circles at the sides of the curved slit exert a slight but continuing pressure against the flange wings, preventing the flaps from slipping open. This firm closure at the center is abetted by the dust flaps, which are also curved and which slide into small curved slits on each side of the full-width flap forming the slit locks.

The slit-and-flange arrangement of the main flap and the dust-flap slits combine to give an unusually secure locking closure for a tucked carton. The carton must be torn in order to open it.

Also significant is the fact that the carton design allows the side panels to be used entirely for mer-

chandising messages. With most tuck locks, the side panels are at least partially taken up by construction of the lock. In the Sara Lee carton the small amount of space needed for the lock arrangement comes at the back of the carton, which—with a full 34 sq. in. of space for promotional copy and artwork—can easily afford to sacrifice this small amount.

#### Cartoner

Sara Lee's new cartoner, modified by the box supplier to handle the special tuck flap, runs at 80 to 85 cartons per minute, though it is capable of production speeds up to 100 per minute because of the fact that the product is frozen before cartoning and is therefore very manageable.

Frozen bags are loaded manually into individual pockets on the product conveyor. Meanwhile suction heads pull carton [Continued on page 304]

SUPPLIES AND SERVICES: Polyester/polyethylene "Thermolam" laminated bags by Continental Can's Flexible Packaging Div., Mt. Vernon, O., using Du Pont's "Mylar" polyester film and Eastman's polyethylene resin. Anchor-lock cartons with Fidel-I-Tone fine-screen lithography and "Par-A-Glaze" wax finish by Lord Baltimore Press, 425 Madison Ave., New York 22. Cartoner by Clybourn Machine, 6479 N. Avondale Ave., Chicago 31, and distributed by Lord Baltimore. Package design adapted from original design by Jim Nash Associates, 527 Madison Ave., New York 22. Heat sealer by Pack-Rite Machines, Milwaukee 1. Shippers by Stone Container, 4200 W. 42 Pl., Chicago 32.



**Carton and shipper both carry distinctive Sara Lee logotype, rose-cerise color and field of stars. Package bears strong and intentional resemblance to Sara Lee baked goods.**



**Heat sealer applies three separate bands with air space between. Should slight amount of product penetrate the first seal, it is captured by the second and third seals. Note the notches and directions on bag for easy tear opening.**





## HOW TO GO TO

**T**he 29th National Packaging Exposition is on stage in Atlantic City next month. With it comes an unparalleled opportunity for visitors to find under a single roof the most advanced ideas in package constructions, machinery, materials and services to meet the needs of large and small companies in almost every product field. This is the only national packaging show to be held this year.

Also there for the taking by astute packagers will be authoritative advice from sales, research and development experts representing packaging-field supplier firms from all over the U.S. and Europe.

The question is: Will showgoers capitalize on these opportunities? It has been observed by one long-time exhibitor that imagination is a commodity often left at home by show visitors. A packager who confines his show tour to the exhibits of suppliers of containers he is already using is passing up a rare chance to get at first hand the facts on other packaging methods or materials that may help him do his job better, faster and at lower cost.

This observation is particularly significant in light of the fact that some 25% of the 25,000 or more packaging-show visitors this year are expected to be decision-making top-management personnel. Moreover, as often emphasized in these pages, most of today's packaging developments are traceable to industry-to-industry cross fertilization of ideas.

Here's the formula suggested by exhibitors who, like this magazine, have participated in the show

since its beginning in 1931: First, scan the show directory to get a general idea of what's to be seen. Next, take a half-day tour of all the booths, noting the exhibits you will want to visit again. Finally, return to the booths noted on the first trip for detailed discussion with exhibitor personnel.

It is suggested that these return visits be made during the last two days of the show. The early rush will be over and booth personnel will have more opportunity for leisurely, uninterrupted discussions with individual packagers.

The unique opportunity to obtain answers to technical questions is pointed out by Dr. Nelson Allen of Du Pont: "At Convention Hall there will probably be more technical people of the packaging field than at any place again until the next Packaging Show. Here, under one roof, will be a wealth of answers for any questions on packaging research, development, technique or mechanics."

### Packaging Show

Sponsored again by the American Management Assn., the 1960 show opens at Atlantic City's newly refurbished Convention Hall on Monday, April 4. It will run for four days, through Thursday, April 7. Total show time is 33 hours. The show opens each day at 10 a.m. and closes on Monday and Wednesday at 6 p.m., Tuesday at 9 p.m. and on Thursday, the last day of the show, at 4 p.m.

More than 330 exhibits will be on view in Con-



*A broadened outlook can help you gather new ideas of greater value at 29th AMA exposition in Atlantic City, April 4-7;*

*'Packaging for Profit' is theme of April 4-6 Packaging Conference*

## **A PACKAGING SHOW**

vention Hall's spacious, two-level exhibition area.

In the field of packaging materials, thermoplastics, both new and traditional, will make news at the show. At least two companies will run polypropylene on automatic overwrapping machinery. Thermoforming applications of this tough, clear plastic also will be demonstrated. Showgoers can examine a new general-purpose polyethylene packaging film produced by a special extrusion technique that is reported to impart greater strength and sparkle.

In machinery, high-speed plastics-handling equipment will bid strongly for packager attention. And there will be ample representation of machinery for handling rigid plastic containers. Among the machines is a new gravity filler which reportedly will not collapse or distort thin-wall plastic bottles.

### **Packaging Conference**

Running concurrently at Convention Hall with the first three days of the packaging show is AMA's annual National Packaging Conference. All conference sessions will be held during the mornings only.

The theme of the 1960 conference is "Packaging for Profit." This topic will be explored at the general session on opening day, Monday, April 4. A highlight of the three-hour session (9:30 a.m.-12:30 p.m.) will be a description of the role and goals of packaging at Montgomery Ward & Co.

Three concurrent panel sessions will be held the following morning. They will cover package production, research and marketing. The conference winds up Wednesday, April 6, with two concurrent panels on "the profiles of packaging." One panel will dis-

cuss this topic from the viewpoint of package development and engineering; the other from the viewpoint of package design and merchandising.

Advance mail reservations for the conference are being accepted by AMA, 1515 Broadway, New York 36. Fees for the full conference are \$25 for AMA members, \$35 for non-members. Single-session fees are \$10 and \$15, respectively. Conference registrants will be admitted to the exposition without paying the \$2 show-registration fee. Visitors who do not attend the conference, however, are required to pay \$2 at the exposition door.

To shorten the time required for show registration, advance registration forms and "time saver" address plates are available on request to the show management, Clapp & Poliak, Inc., 341 Madison Ave., New York 17. Assistance in making hotel reservations will be provided by the Housing Bureau, AMA National Packaging Exposition, Atlantic City Convention Bureau, Atlantic City.

This year, as last, J. R. Sonneborn serves as chairman of the Packaging Exhibitors Advisory Committee in charge of the exposition. Mr. Sonneborn is general sales manager of Stokes & Smith Co.

Following, listed alphabetically, are details of exhibits from all exhibitors who answered MODERN PACKAGING's questionnaire before the deadline date. A complete list of exhibitors up to press time appears in MODERN PACKAGING's Show & Conference Guide, inserted under the front cover of this issue.

**A-B-C PACKAGING MACHINE CORP.** Booth 550. Exhibit of Model XSA automatic top and bottom short case sealer; also semi-automatic case packer. *Personnel:* O. A. Rupp, A. G. Watkins. *Hotel:* Crillon.

**ABBOTT PLASTIC MACHINE CORP.** Booth 1157. Exhibit of skin-pack and blister-pack machinery; also slitting equipment for skin-pack and blister-pack process. *Personnel:* C. Murano, N. Kelly, H. Drake, S. Cohen, J. Margosein, C. Borenstein, J. Levin, D. Zerber, E. Hardman, F. Hardman, B. Franklin, B. Lack. *Hotel:* Tremont.

**ACME STEEL CO.** Booth 565. Semi-automatic steel-strapping machines [*Exhibitors' list continued on page 320*]

---

Your complete personal guide to the AMA Packaging Exposition and the National Packaging Conference has been prepared by MODERN PACKAGING. You'll find this convenient, pocket-size program inside the front cover of this issue. Fold it up and take it with you to Atlantic City. It contains an alphabetical list of all show exhibitors, a floor plan identifying booth locations and the full conference program.

---





**Pre-formed paper shippers** of printed 130-lb. kraft are set up (left) for loading at Pillsbury on a special machine that assembles metal-end fibre cans in six lanes (background), then ram loads 24 containers into sleeves. Reinforcing strips of heavier paper inside scored and folded edges of shipper prevent cutting by cans.

## Paper-sleeve shipper

*Loaded automatically with 24 fibre cans of biscuits, tightened and sealed, this reinforced kraft-paper shipping 'wrap' saves Pillsbury 40% in weight and 20% in cost*

**A** new type of paper shipping package, which is neither a bag nor a wrap but combines features of both, has made its appearance at Pillsbury Mills, Minneapolis, together with a machine that automatically loads and seals 24-can units of Ballard refrigerated biscuits at a rate of 20 cases per minute.

The shipper is simply a prefabricated printed sleeve of 130-lb. wet-strength kraft paper, with reinforcing strips of heavy paper. Tailor made to fit the product, it holds Ballard's 8-oz. fibre cans so snugly that there can be no shifting once end flaps are folded and sealed with cold-resin adhesive.

An ingenious device on a horizontal-action loading machine squares up the six-by-four pattern of cans after they have been inserted with the rows slightly offset, thus tightening the load.

In this application, the paper sleeve replaces a standard corrugated shipping case with savings, according to Pillsbury, of 40% in weight, 20% in cost, 90% in warehouse space for empties and 8% in cubage of filled shippers. Despite its light construction, the container is said to stack well in the warehouse and to deliver the product without damage, either palletized or not.

The pre-formed glued sleeve comes scored and folded into rectangular shape and open at both ends. Four 2-in.-wide reinforcing strips of paperboard glued inside along the score lines prevent the metal-end cans from cutting the wrap. The container has a longitudinal tear strip and die-cut notch for easy opening and a printed dotted line at the center of the pack for dividing into one-dozen units. Tapering



slits at each corner form flaps, which facilitate handling and end loading of the fibre cans on the special supplier-devised packaging machine.

This compact 20-ft. machine resembles multipackaging equipment in its mechanical action. At the Pillsbury plant in Atlanta, the new shippers are fed by hand. A single operator takes each flat sleeve and, by opening it, reverses the folds. The sleeve is then fed through a roll that "breaks" it 180 deg. As each tube leaves the roll it springs back in erect position and is picked up by a deep-pocketed conveyor operating with an intermittent action.

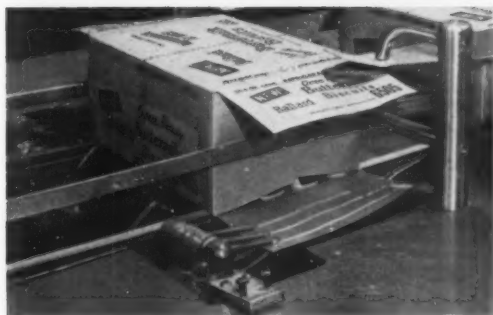
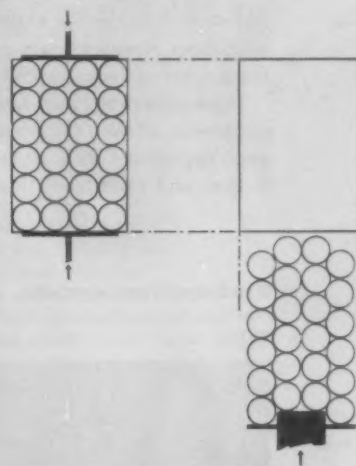
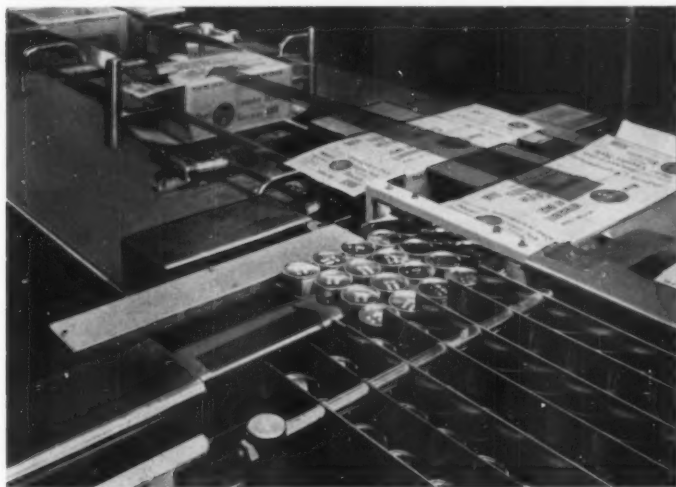
Filled and sealed cans of biscuits travel from the filler to a rotary surge collection plate, where they are picked up by a 2-ft. steel belt and aligned in six lanes by vibrating separator plates. Entering the loading magazine, the cans close six individual elec-

trical switches on an end plate to start an end-loading ram action that slides four rows of six cans each into the paper-sleeve container.

A reciprocating pusher arm with a special off-set face plate enables it to advance slightly the center two rows of cans, thus reduces the width of the load while all 24 cans are pushed into the paper sleeve. As the sleeve passes to the next station, one set of end flaps is folded in. Then two more rams, one located on each side of the conveyor, compress the load from each end, squaring the cans in the sleeve and tightening the pack. From here on, cans are held in position by side rails as the case is transferred to a continuous-motion [Continued on page 318]

SUPPLIES AND SERVICES: "Bax" sleeve container and loading and sealing machine by St. Regis Paper Co., 150 E. 42 St., New York 17.

**Offset loading** is key to a tight, finished package. T-shaped ram (lower arrow) slightly advances the two inner rows of cans during loading to reduce total width of the grouped containers. At next station, rams on either side of shipper square the cans and tighten package (as in diagram, right). Gluing and compression follow.



**Special gluing technique** utilizes plastic tube applicators to place glue strips on the inner and outer sides of the bottom flap only.

**Stackability** of lightweight paper containers is pointed up by 14-high pallet loads in Pillsbury's refrigerated storage warehouse.





# Seal for a spray can

*Plasti-Kote wins self-selection acceptance for aerosol paints  
via cellulose band that locks cap to container  
to eliminate pre-purchase testing and difficult in-store clean-up jobs*

**H**ow can you seal an aerosol can to prevent shoppers in self-selection stores from "trial spraying" the contents?

This is a question that, until just last month, kept a Midwestern packager of spray paints out of the nation's big-volume markets. But now, its problem solved with an adaptation of a simple sealing device which has been used for years by wine and liquor bottlers, the company has begun to broaden its distribution to include supermarkets, variety stores and other self-selection outlets. Production facilities have been doubled to accommodate an expected sharp upturn in sales in 1960.

The company is Plasti-Kote, Inc., Cleveland (100 employees, \$4,000,000 gross). A packager of lacquer, enamel and other types of aerosol-spray paints in 8-oz. and 16-oz. cans, Plasti-Kote over the years

has not enjoyed great acceptance from self-selection store managements. The reason: Many shoppers feel it is necessary to test spray an aerosol product before buying it. And—unlike such aerosols as insecticides and room deodorants, which dissipate in the air after spraying—aerosol paints present a formidable clean-up problem to stores.

It was obvious to Plasti-Kote that the only way to adapt its line of aerosol paints to the requirements of self-selection marketing was to make containers tamperproof. But the problem was: how to do it economically and at a speed consistent with the projected need for increased production?

The packager found its answer in the shrinkable cellulose bands used by bottlers to effect a sanitary, tamperproof seal between closure and container. To apply the band, an automatic machine—said to

**Band-applying machine,** integrated into Plasti-Kote's aerosol-paint packaging line, automatically cuts ½-in.-wide units from reel-fed cellulose tubing and positions them on capped cans at 60 per minute. Tubing is first immersed in water-and-catalyst bath to promote rapid shrinkage after application.







**Tamperproof seal** formed by tough-fitting, transparent band prevents trial spraying. Self-selection stores turned thumbs down on the previous unsealed containers for spray paint.

be the first of its kind ever used in the aerosol industry—was integrated into the company's packaging line. Only a minor modification of the can's closure was needed to enable the Plasti-Kote container to be handled on the new installation.

After filling and capping, cans are fed into the machine, which applies a 1/2-in.-wide transparent cellulose band that overlaps the upper edge of the can body and a beveled ridge that has been engineered into the lower rim of the snap-on metal cap. Bands are cut from reel-fed cellulose tubing which is first immersed in a water-and-catalyst solution to promote rapid post-application shrinkage. The reel of tubing can be spliced while the machine is in operation, which is a significant aid to keeping down the costs of packaging.

The cellulose-seal bander is geared to the 60-cans-per-minute speed of Plasti-Kote's filling and capping line, although higher speeds are possible. To take care of this year's expected sales increase, the packager has installed an additional filling and capping line. Both of the lines will be serviced by the single cellulose-seal banding machine.

Actually, the tight-fitting cellulose band does more

than guarantee a tamperproof container for Plasti-Kote's line of spray paints. It also prevents accidental loss of a screw-on metal spray valve which is placed loose inside the closure during the capping operation. It is desirable for the spray valve to be removable, the packager points out, so that it can be cleaned conveniently after each use to avoid valve clogging caused by paint build-up.

The actuator attachment is not screwed to the valve base during packaging, to eliminate the possibility of accidental product discharge and because the actuator's lever is too long to permit proper seating of the welded "double" cap. (The protective inner cap snaps over a beaded rim around the valve base; the broad outer stack cap fits into a depression around the can's shoulder.)

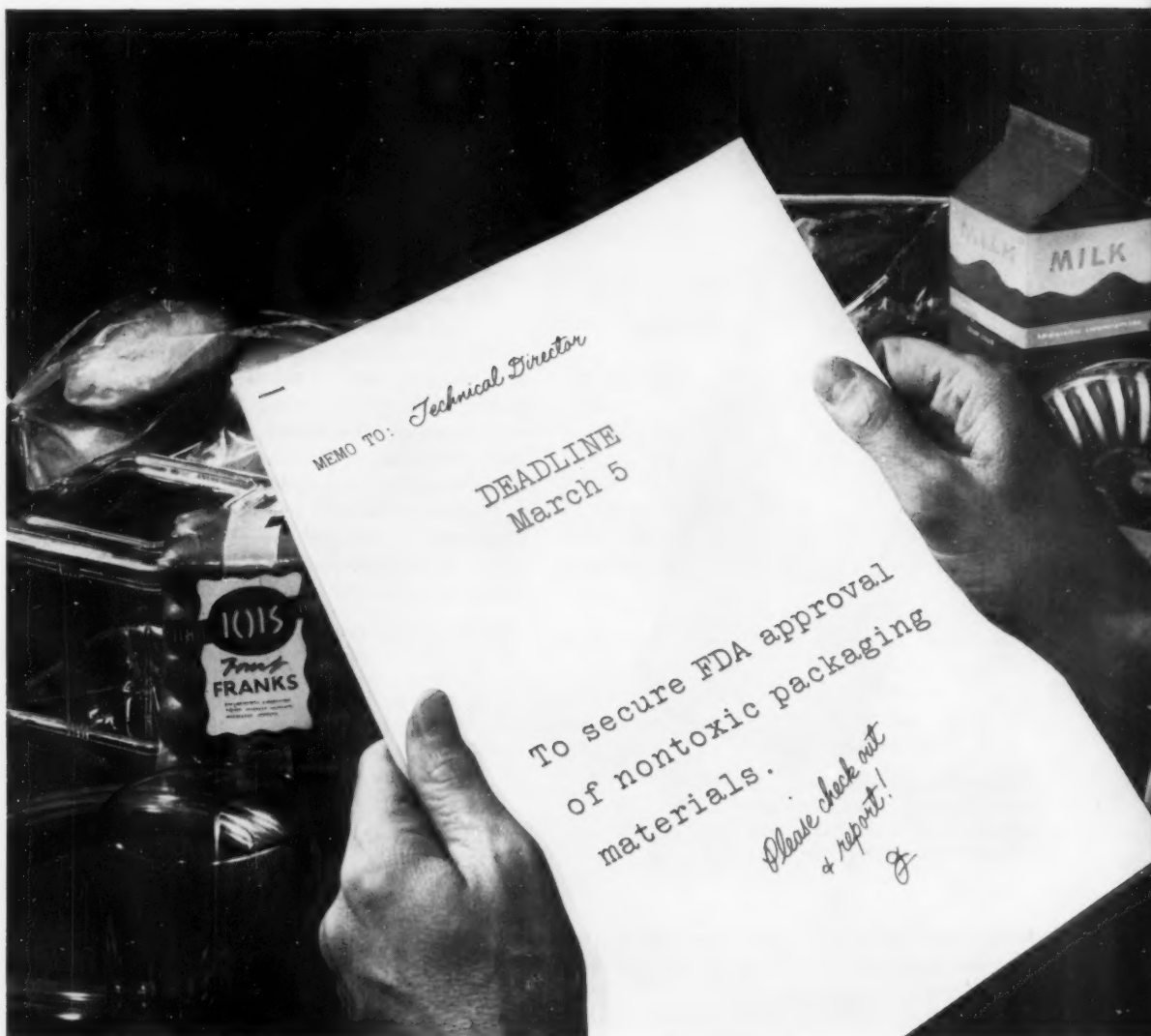
Plasti-Kote concedes that the new cellulose-band and machinery installations represent a considerable initial increase in packaging costs. However, the company is confident that [Continued on page 283]

**SUPPLIES AND SERVICES:** "Cellubander" cellulose-banding machine by John Burton Machine Corp., 420 Market St., San Francisco 11, using Du Pont "Cel-O-Seal" bands. Cans by American Can, 100 Park Ave., New York 17, Continental Can, 100 E. 42 St., New York 17, and Crown Cork & Seal, 9300 Ashton Rd., Philadelphia 36. Metal closures by Sterling Seal Co., Erie, Pa.

**Protection** against accidental loss of detachable spray head also is provided by new cellulose seal. Packed loose inside the can closure, spray head screws onto valve base, can be removed for cleaning. Note closure's sturdy "double-cap" construction.







## Simplify evaluation work. Specify use of **MONSANTO'S** **SEVEN FDA-APPROVED PLASTICIZERS**

The 1958 Food Additives Amendment to the Federal Food, Drug, and Cosmetic Act requires extensive evaluation of many plastic packaging ingredients... including extraction tests, and possibly expensive, time-consuming spectrophotometry, radioactive tracing, and animal-feeding tests. Specification of a Monsanto approved plasticizer can help you minimize this problem.

Seven Monsanto plasticizers approved for nontoxic applications can give you more assurance of meeting FDA specifications—and also provide a broad range of properties to meet the most particular packaging requirements. Five Monsanto plasticizers (SANTICIZER 141, SANTICIZER E-15, SANTICIZER B-16,

Monsanto di-isobutyl adipate and diethyl phthalate) have earned *complete acceptance* from the FDA for use in plastic packaging for aqueous, fatty or nonfatty foods.

By specifying use of these Monsanto approved plasticizers, you can be more certain that your packaging materials are toxicologically safe and comply with the 1958 Food Additives Amendment. Check the tables shown here. They're a convenient guide to industry's largest and most diversified line of plasticizers for nontoxic formulations... from Monsanto. For more details and a copy of the 1958 Food Additives Amendment to the Federal Food, Drug, and Cosmetic Act, just use the convenient coupon.



### Plasticizer compatibility with six plastic materials

Monsanto Plasticizers	Polyvinyl Chloride	Polyvinyl Acetate	Cellulose Acetate	Ethyl Cellulose	Acrylic Type	Nitrile Rubber
Santicizer 141	C	C	SC	C	C	C
Santicizer E-15	C	C	C	C	C	—
Santicizer B-16	C	C	LC	C	C	C
Di-isobutyl Adipate (DIBA)	C	C	I	C	C	C
Diethyl Phthalate	LC	C	C	C	C	C
Diocetyl Phthalate (DOP)	C	SC	I	C	SC	C
Di-isocetyl Phthalate (DIOP)	C	SC	I	C	SC	C

C (Compatibility)—25-100 parts per 100 parts resin. LC (Limited Compatibility)—10-50 parts per 100 parts resin. SC (Slight Compatibility)—1-25 parts per 100 parts resin. I (Incompatible)

### Job-rated plasticizer performance (where "1" is best, based on typical results)

Monsanto Plasticizer	Non-Toxicity	Low Volatility	Grease & Solvent Resistance	Water Resistance	Low Temperature Flexibility	Low Cost
Santicizer 141	1	1	1	2	2	1
Santicizer E-15	1	4	1	3	3	2
Santicizer B-16	1	2	2	3	3	2
Di-isobutyl Adipate (DIBA)	1	3	2	3	1	2
Diethyl Phthalate	1	5	1	2	3	1
Diocetyl Phthalate (DOP)	X	1	3	1	2	1
Di-isocetyl Phthalate (DIOP)	X	1	3	1	2	1

X—Accepted for use with foods of high water content only.

## FOR NONTOXIC PLASTIC APPLICATIONS

### Informative Booklet on Nontoxic Plasticizers

Now Available

Gives specific advantages in numerous applications, describes outstanding features and lists specification properties of seven Monsanto nontoxic plasticizers. For your copy, use the convenient coupon.



With no bias in favor of a single nontoxic plasticizer, Monsanto develops plasticizing systems custom-made to fit your needs best.

Santicizer: Monsanto T. M., Reg. U. S. Pat. Off.

**MONSANTO CHEMICAL COMPANY**  
Organic Chemicals Division  
Plasticizer Dept. 1A, St. Louis 66, Missouri

Please send the booklet, "Seven Monsanto Plasticizers for Nontoxic Applications," plus a copy of the 1958 Food Additives Amendment to the Federal Food, Drug and Cosmetic Act.

Name .....

Company .....

Address .....

City ..... Zone .....

State .....

**Monsanto**



# PUSH-UP confection

*A packaging idea is pushing up sales, too,  
for ice-cream companies as  
big brand names turn to tubular film pouch,  
automatically filled and  
completely sealed around flavored ice*

**A**n elongated polyethylene-coated cellophane pouch containing a bar of fruit-flavored water ice has given low-cost flexible-film packaging a secure foothold in still another product field. The rousing success of the new confection (unit sales are well up in the multimillions) also has implications for packagers in many product fields. It is both a graphic demonstration of how convenience packaging can create rapid acceptance for a new product and of the advances in materials and high-speed machinery that are steadily diminishing the roster of "insoluble" packaging problems.

The frozen novelty confection is a brainchild of DCA Food Industries, New York. It developed the basic product and package, and worked out refinements on an automatic forming, filling and sealing machine that produces 60 pouches per minute.

DCA itself does not package the water ice—whose brand name is Gold Mine Icicle—but it licenses the brand name and production rights, and leases the packaging machine to local ice-cream companies throughout the U. S. and in foreign countries.

A similarly packaged frozen confection, with natural orange juice as the base, is being sold on the West Coast under the nationally known brand name of Minute Maid. Soon to go national, this item also is packaged by local firms, under an agreement with DCA and the Minute Maid Corp., Orlando, Fla. (2,500 employees, \$99,123,912 gross).

The protective film package is admirably suited to the flavored-ice product it contains. It is a 10-



**Dripless** elongated film pouch keeps the Gold Mine flavored ice bar, developed by DCA Food Industries, from melting onto hands or clothing. Sealed package is opened by tearing across its top heat seal. Confection is eaten by squeezing it up from bottom of pouch.



**Multi-unit sales** of Minute Maid Orange Bar are achieved with this four-bar freezer carton. Individual pouches can be stripped off by separating them along perforations applied on the packaging machine.



in.-long pouch which is opened simply by tearing across the top heat seal. Without the need for handling the product itself, the frozen confection is squeezed up from the bottom of the pouch as it is consumed. Filled in the liquid state, the product is specially formulated to prevent its adhesion to the interior package surface after freezing.

An obvious appeal of the package is that it eliminates the dripping and soilage danger usually associated with frozen confections on stick handles. Another inherent and merchandisable advantage is that the four-side-sealed package protects the product from direct handling and other sources of external contamination right up to the moment it is consumed by the customer.

Testimony to the film package's effectiveness in achieving the functional and merchandising aims set for it is the fact that it was one of four "market-breakthrough" award winners in National Flexible Packaging Assn.'s fourth annual competition last year. The awards were presented to successful flexible packages for products which had never before

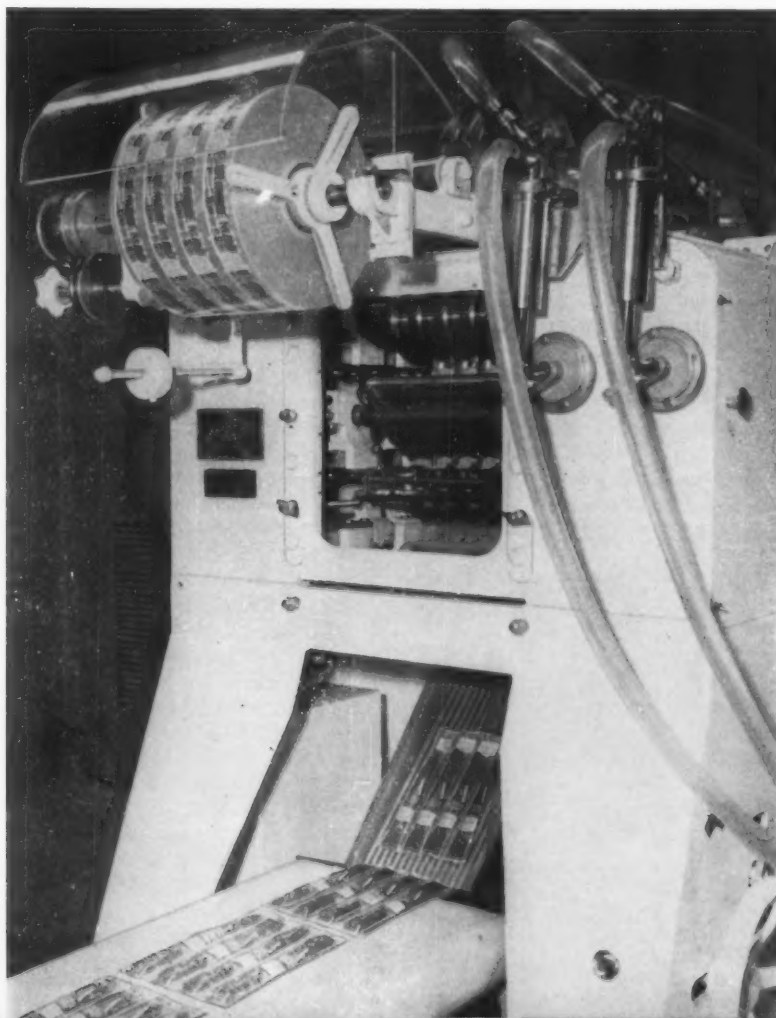
been merchandised in that type of a package.\*

But, like most "overnight sensations," this pouch package has a long history of hard work. Three years of developmental work passed from inception of the idea to actual production start-up. It was necessary not only to achieve an efficient container, but also to minimize packaging costs in order to insure an adequate profit margin on a fast-turnover product that retails at a low price.

These packaging economies are achieved both in the film and on the machine for running it. The pouch material consists of a 2-mil extrusion coating of polyethylene on 300- [Continued on page 286]

SUPPLIES AND SERVICES: Forming, filling and sealing machine by Bell Machine Co., Oshkosh, Wis. Printed polyethylene-coated cellophane film by Milprint, Milwaukee 1, and Speedmaster Packaging, 500 W. 52 St., New York 19, using Du Pont polyethylene and Avisco MSBO and Du Pont cellophane. Minute Maid cartons by Milprint. Minute Maid design by Jim Nash Associates, 527 Madison Ave., New York 22.

\*See "Winners in Flexible Packaging," MODERN PACKAGING, Dec., 1959, p. 107.



**Four at a time, pouches are formed, filled with the flavored liquid and sealed. As filled pouches come off the machine, they are cartoned and frozen.**





1



2



3



4



5

## PACKAGING PAGEANT

- 1 Moog Industries designs a shipper to encourage dealers to display a new product—Moog Car-Buoy—rubberized springs for automobiles that correct rear-end sag. When the top of the bleached white box is folded back and tucked into the side, the product and printed information about the springs, including price, are in full view. Shipper, Gaylord Container Div., Crown Zellerbach, St. Louis, Mo.
- 2 Elegant presentation case for the new Lady Ronson Superbe electric shaver is a luxurious re-usable evening bag, smartly styled in black velvet, with metallic gold trimming, silken carrying cord and inside-mirrored lid. This glamorous package is the Ronson Corp.'s latest bid for the growing market for women's electric shavers. Case, Dart Craftsman Corp., Corona, Long Island, N. Y.
- 3 Preference for tall, slim shapes in bottle styling is reflected by this tapered, round, 5-oz., clear glass container for Richard Hudnut's new hand lotion, promoted as being as "modern as tomorrow's rocket." The wide flaring base narrows upward to a trim white "nose cone" urea cap. White oval

labels of embossed foil printed in green and circled with gold coloring are an effective contrast to the product's ice-blue color visible through the glass. Glass, Continental Can's Hazel-Atlas Glass Div., Wheeling, W. Va. Cap, Armstrong Cork, Lancaster, Pa. Label, Donrico, New York.

- 4 New shipping cartons of reduced size and rectangular shape hold the same contents in half the space of former ones used by Permacel for shipment of pressure-sensitive tapes. Made of 200-lb.-test, RSC-type, A-flute construction, new cartons measure only 23 by 15¼ by 6⅜ in. Advantages claimed: easier handling, increased safety due to interlocking pattern of palletizing that minimizes tipping.
- 5 Colorful corrugated boxes that convert into counter and shelf display packages upgrade a new line of 11 power tools manufactured by American Power Tool Co., Div. of American-Lincoln Corp. Die-cut inserts hold the tools firmly in place, yet permit customer examination of the merchandise. Boxes are three-color printed. Boxes, West Virginia Pulp & Paper's Hinde & Dauch Div., Sandusky, O.



**6** In England, Bentalls adopts as a retail package for "A Double Scotch," a liquid-holding transparent-film pouch similar to those used in the U. S. only as a promotional gimmick for an individual cocktail. The polyethylene-coated cellulose film package consists of twin 4-by-2½-in. pouches, each holding a single measure. The pouch is folded over and a printed header label is crimp sealed to the top. Type 4M20 film, British Cellophane, Ltd., London. Contract packaging, Ivers-Lee, London.

**7** Shulton devises an interesting construction for a combination deal offer of two bottles of Friendship Garden Hand and Body Lotion. The 6-oz. hobnailed bottles with pushbutton dispensers are held together by a specially die-cut and printed paperboard band. Bottle, Wheaton Glass, Millville, N. J. Dispenser closure, Evans-Crowder Co., South Lyon, Mich. Paperboard band, Federal Paper Board's Folding Carton Div., New Haven, Conn.

**8** To merchandise its new Old Fashioned Coffee Time Molasses Cookies, Charlotte Charles, Inc., selected a 9-oz., four-color-lithographed metal container il-

lustrating coffee-time scenes. Cushioned between layers of grease-resistant, white corrugated glassine, the cookies are protected against breakage by a corrugated glassine liner. Container, Olive Can Co., Chicago. Glassine, Malanco, Evanston, Ill.

**9** To make toothbrushing fun is the strategy behind the design of a carton for Stanley Home Products' Junior Dental Kit. In the kit are dental mirror, brush holder, paste, brushes, "Toothbrush Rodeo" dental chart and a package of 100 stick-on stars to keep track of the daily chore. These kits are sold exclusively through the Stanley Hostess Party Plan. Carton, Federal Paper Board's Folding Carton Div., New Haven, Conn.

**10** Four refrigerated food specialties packaged in foil-laminated heat-in trays, along with their own special sauces put up in separate paper cup containers, are being marketed by Van de Kamps of Los Angeles. The cup, which fits into a die-cut opening, is simply removed by the consumer before placing the heat-in tray in the oven. Tray packages, American Can's Marathon Div., Menasha, Wis.



**6**



**7**

**8**



**9**



**10**





- 11** Kraft Foods has added an easy-opening tear string to transparent pouch packages for its line of sliced natural cheeses. The string opens the package along the side, rather than across the top, making it easier to remove slices. Surface design of the pouch has been revised to include a mark indicating the tear-string opening.

- 12** A bold technique in ceramic labeling gives quick recognition to three new beauty aids in 16-oz. glass containers introduced by Amber Chemical Co. for marketing exclusively through food brokers to retail food outlets nationally. Labeling and plastic closures are in contrasting colors. Containers and closures, Owens-Illinois Glass, Toledo, O.

- 13** Three new gift packages, each containing a "Gift Threesome" of three pairs of men's stretch socks, have been introduced by Burlington Hosiery's Jerks Socks-Wovenright Div. for three holiday occasions. Each features the same die cut of a man's profile, but colors and surface design distinguish each: a cupid heart in white on a red background for St. Valentine's Day; white shamrocks on Kelly

green for St. Patrick's Day; Easter eggs on the yellow Easter package. Packages, C. W. Zumbiel Co., Cincinnati.

- 14** Perry Mfg.'s new "Poodle Set" of matching Jamaica shorts and long socks for girls is marketed nationally in department stores and food chains. The bag, of 0.0015 extra-clear polyethylene, flexographic printed, has a paperboard insert that makes it rigid enough for stand-up display on counters and racks. Its large dimensions, 7 $\frac{5}{8}$  by 15 $\frac{1}{2}$  in., discourage pilferage. Bag, Lassiter Corp., New York.

- 15** A spirally arranged die-cut collar that attaches a dram bottle of perfume to 3-oz. bottles of Max Factor Spray Mist cologne gives a new twist to a special deal offer. Special combination is offered in two fragrances, Hypnotique and Primitif.

- 16** A new carrier carton is designed for ease of handling Ecusta "Waylite" offset duplicating paper. Two carriers are packed in an outer corrugated case equipped with tear tape. Each holds five packages of 1,000 sheets each. Handles facilitate

**11**



**12**



**13**



**14**



**15**







16

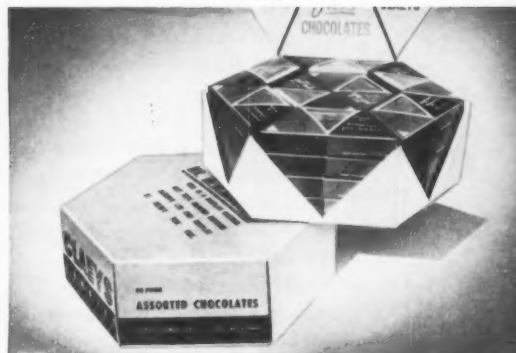
17



18



19



20

## PACKAGING PAGEANT

removal of the carrier and open sides allow packages to be slipped out rapidly. Both the carton and the carrier are made of nonskid corrugated board. "Skid-Master" board, Olin Mathieson, New York.

- 17** New swirl-design bottles that require a minimum of shelf space, are easy to pick up, hold and pour from, have been adopted by Lady's Choice Foods for packaging syrup, salad oil, cider vinegar and distilled vinegar. Bottles—in 12-oz., pint, quart, 40-oz. and 24-oz. sizes—were designed after store and consumer studies to determine the most acceptable characteristics for containers for these products. Design, Keith Thomas Studio, Los Angeles. Bottles, Anchor Hocking's Maywood Glass Co., Los Angeles, and Thatcher Glass Mfg., New York. Closures, I. F. Schnier Co., San Francisco.

- 18** Transparent polyethylene bags in sizes ranging from 2½ to 50 lbs. are used by Broadlawn Products for its Barnyard Gold line of potting soils and soil builders. The tough film, highly resistant to puncture and tear, is also a water-vapor barrier that maintains proper moisture content in the products.

Design and logo are the same for all bags, but background colors differentiate each product. Bags, Tower Packaging, Skokie, Ill. Tenite (Eastman Chemical) polyethylene film extruded by Rexall's Chippewa Plastics Co., Chippewa Falls, Wis.

- 19** U. S. Caster Cup Corp. reports increased sales and savings in packaging costs since introducing its new vacuum-formed package for Carpet Guards, plastic caster cups. Each holds four cups plus mounting hardware. Film is 0.004-in. polyethylene. Card has die-cut hole for rack hang-up. "Visqueen" film, Union Carbide's Visking Co., Chicago.

- 20** A hexagon-shaped, corrugated shipping-display container of two-piece, telescoping design has been adopted for the unusual trapezoid-shaped individual packages of Claey's Candy's assorted chocolates. The shipper holds eight trapezoids snugly in a layer of eight, with four layers to the box. A zig-zag edge holds candy cartons in neat stacks, while exposing them all to view. A trapezoidal riser needs only to be folded back from its flat shipping position. Display-shipper, Stone Container, Chicago.



*Bell & Howell movie cameras are protected in three-part expanded plastic housing that reduces assembly and shipping costs and improves retail demonstration and display*

## Cameras nested in

**C**omplete enclosure of delicate motion-picture cameras by means of fitted protective-packaging components custom molded of expandable polystyrene is providing multiple packaging advantages for Bell & Howell, Chicago, manufacturer of photographic and motion-picture supplies and equipment (7,500 employees, \$100,000,000 gross).

This appears to be one of the first examples of a trend in the camera industry toward the use of featherweight molded foam for combined platform and cushioning functions.

Use of polystyrene foam parts initiated redesign of the B&H camera package with these results:

1. Damage to the delicate mechanisms in shipment and handling has been almost eliminated.

2. Packaging labor costs for the much-simplified new package are approximately half those for the previously used package, according to Charles W. Lincoln, Bell & Howell packaging engineer, who designed the new package.

3. Total weight of the package has been cut 25%, reducing shipping costs.

4. Merchandising and display appeal of the new package have been markedly improved.

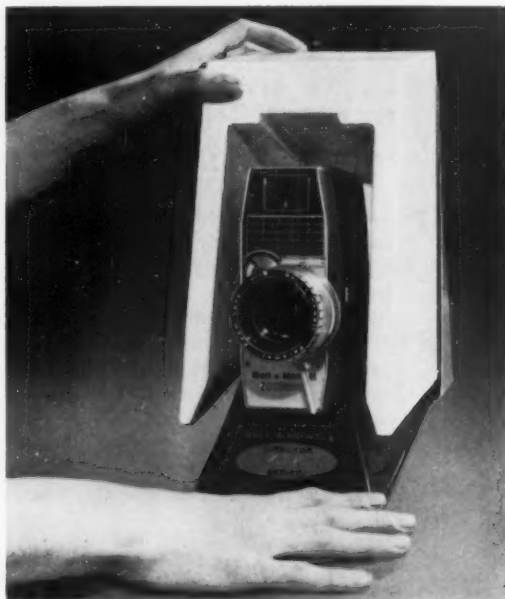
5. Quality connotations appropriate to the product are much stronger in the new package.

6. Use of the conventional paperboard folding carton or set-up box is eliminated.

It is significant that B&H's packaging department has accomplished all this without an increase in

### Ease of assembly is important advantage

**Packer fits camera into polymer-covered base molded of expanded polystyrene. Display card is slipped under the base and folded around the back of base and camera.**



**Foam housing for back, top and sides is slipped into place between camera and display card. Note pre-affixed label on polystyrene base.**



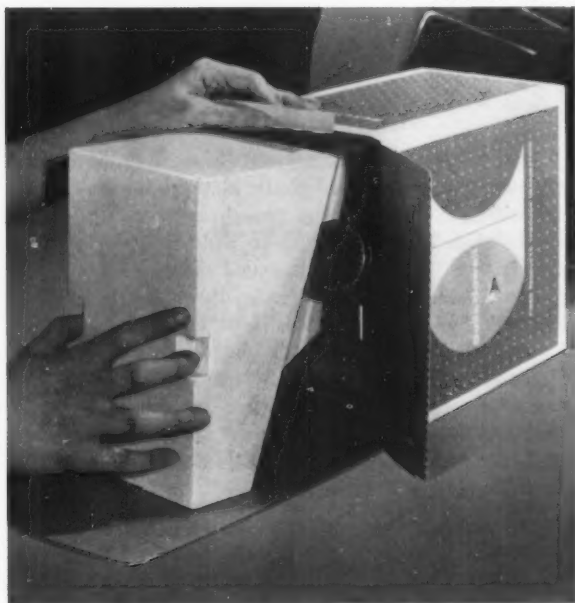
# polystyrene foam

packaging material costs. Though the polystyrene-foam parts are molded to fit the product exactly—and B&H has some 12 different camera models in the new packages—judicious design of the molds and standardization of camera housings permit three molds to serve all 12 models.

The package used for several years by B&H had, when properly put together, maintained a damage ratio lower than the industry average, according to the company. However, B&H wished to reduce damage incidence still further in view of the product retail value—up to \$200. At the same time the company wanted to simplify its packaging operation. The former three-part base, intricate corrugated roll-up, lithographed folding carton and corrugated ship-

## of new package

PHOTOS DOW CHEMICAL



**Partial assembly** is slipped into shipper and the front housing, with die-cut finger grips, is then fitted into place.



**Tough test** of Bell & Howell's new packaging is applied by the toe of Chicago Cardinal halfback, Bobby Joe Conrad. The delicate camera is reported to have come through unscathed.

PHOTO BELL & HOWELL

ping container were complicated for both factory workers and retail personnel to handle.

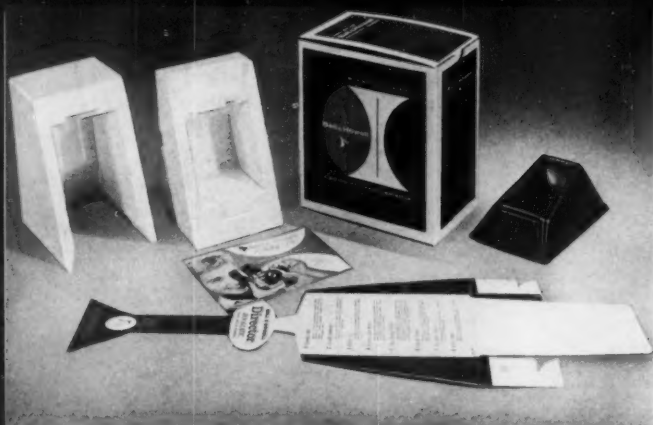
Studies showed that after disassembling the package to show the camera to customers, dealers were often unable to get the roll-up back in and would ship the camera without it. Thus, the product was frequently damaged and the customer dissatisfied.

B&H's new package is so simple to put together that these problems are eliminated. Major container components are a base or pedestal and two covering parts of expanded polystyrene which completely enclose the camera—the molded back piece fits over the back, top and sides, while the molded front piece fits over the lenses and front plate—plus a colorful shipping container. A die-cut lithographed display card and an instruction booklet complete the package. The pedestal is supplied with a molded cover of black ABS polymer which blends with the color and texture of the camera housing. This "cover" carries a label for quick identity of brand and model.

In assembly, the camera is clicked into the base and the display card is slipped beneath the base and folded up around the back of the camera. Then the one-piece back unit is fitted over the camera and in front of the card. This assembly is next slipped into the shipper, the one-piece front unit is fitted into place and the instruction book and warranty are placed on top before the container is closed.

The polystyrene foam parts are designed to hold the camera housing firmly at the top, but they do not touch any moving parts. The pedestal holds the housing snugly at the bottom. The sides, front and





**Components** of new Bell & Howell movie-camera package are (rear, from left): fitted polystyrene-foam housing, colorful corrugated shipping container, ABS polymer-covered plastic base; in foreground, instruction booklet and die-cut display card.

back of the camera are completely surrounded by a layer of air, which B&H considers an effective insulation against shock. There is no movement within the package. B&H has carefully tested the protective ability of its new package and is pleased with its success in taking even extreme abuse.

The part covering the front of the camera is molded with finger grips on either side for easy removal from the corrugated container.

At the retail level, the dealer, when repackaging

the camera for sale or shipment, has merely to place the custom-molded foam parts over the camera front and back, fold over the display card and slip the unit directly into the shipper.

Costs for the plastic-foam components of the new B&H package are kept to a minimum by varying the density of the foam from 2 to 8 lbs. per cubic foot, depending on the amount of protection needed. Critical areas of each part are molded of polystyrene beads just as they are supplied by the manufacturer. This gives a resilient yet tough surface. For portions of each part where less strength is required, the custom molder uses beads which have been partially pre-expanded. The two types of beads are used together in the same mold. [Continued on page 296]

**SUPPLIES AND SERVICES:** Package by Paper Package Co., Indianapolis 6, using polystyrene-foam parts molded of Dow's "Pelaspan" expandable beads by Glo-Brite Foam Plastics' Polyfoam Packers Div., 6415 N. California Ave., Chicago 45, and U. S. Rubber's "Royalite" for pedestal base covers. Lithographed display cards by Paper Package Co. Graphic design of shipping container by Bruce Beck, 205 W. Wacker Dr., Chicago 1. Shipping containers by Container Corp. of America, 38 S. Dearborn St., Chicago 3; Stone Container, 4200 W. 42 Pl., Chicago 32, and Inland Container, Indianapolis 6.

## Foam plastic cushions Polaroid products

Another camera manufacturer now protecting its delicate products in high-impact cushions of expanded polystyrene is the Polaroid Corp., Cambridge, Mass. However, rather than completely surrounding its cameras and accessories with a polystyrene-foam housing, Polaroid uses the material for carton platforms and also for inserts that interlock items in some display packages. Built-up corrugated inserts were formerly used.

Capitalizing on the foam plastic's light weight, shockproofness and easy moldability to any contour, the Polaroid company has developed (1) a variety of platforms to fit such small, individually packed

accessories as its photoelectric shutter and "wink light" and (2) platforms and inserts for such larger items as sets of cameras and attachments.

For the smaller items, the expandable polystyrene is molded as a white platform with recesses into which the product is manually inserted prior to packaging of the combination in a set-up box. For the multi-unit sets, the recessed plastic platform is covered with a printed, die-cut paperboard deck to provide a blue background. The molded polystyrene insert is then fitted over and around the manually positioned items. Molded into the inserts are instructions to dealers to "Remove this insert for display." The completed assembly, already placed in the tray of the set-up box, is then closed with the carton cover. All set-up boxes are further protected in corrugated shippers, as previously.

Polaroid is gradually extending its use of polystyrene foam to other items in its line.

**SUPPLIES AND SERVICES:** Platforms and inserts molded of "Dylite" expandable polystyrene, a Koppers plastic, by Worcester Moulded Plastics, Worcester 8, Mass.; Valley Plastics, Springfield, Mass., and Duval Industries, Winthrop, Mass. Cartons by E. F. Dodge Paper Box, Leominster, Mass., and Consolidated Paper Box, Somerville 45, Mass.

**Platform and insert** molded of expanded polystyrene.







## "Knox furnishes us the packages that sell," say executives of major olive and pickle packer

"When packed in glass, stuffed olives—with their eye-catching colors—are a real stop signal to grocery store shoppers," says the manager of the olive department of one of America's leading food packers,\* a major user of Knox glass.

"In our olive department, for example, 85% of the glass jars we use—in nine different sizes—are Knox products.

"We take full advantage of Knox's quality and clarity by hand-packing our olives in patterns that give maximum package attractiveness. We've found that this, plus proper display in the store, can increase a grocer's olive sales by ten to fifteen percent."

\*Name available on request.

The manager of the same company's pickle department says: "In modern supermarkets, the product has to sell itself. That's why we use glass—to take advantage of impulse buying. Knox's quality glass can take the strain of the packing process—including the thermal shock of pasteurizing—and still give us the best available sales package."

Find out how Knox's quality product, reliable delivery, and outstanding service can play an important role in increasing your sales by furnishing the package with maximum shelf-impact. Contact Knox Glass, Inc., Knox, Pa., or any one of Knox's 37 sales offices.

*the new/***KNOX GLASS**





**Two thermoformed pieces, spot welded together, upgrade appearance of these transparent packages, discourage pilferage and, in the case of the Tek denture brush, perform a function of showing the different-shaped bristles on each side of the package.**

## New way to seal blisters

*Interrupted edge produced by serrated electronic sealing dies  
doubles capacity of sealing equipment and  
at same time produces decorative edging for thermoformed packages*

**O**ften the most efficient package is not the most attractive to look at. But in the case of some new vacuum-formed blister packages, comprised of two opposing layers of transparent cellulose acetate, an interrupted thermoformed seal—designed originally simply to get more mileage from an electronic sealer—has turned out to provide an interesting new type of decorative edging.

The technique was developed by a leading supplier of thermoformed packages while designing the double-blister Dura-Gloss lipstick package for A. R.

Winarick, Inc., which, incidentally, won top honors in the recent *Variety Store Merchandiser* competition. It has since been adopted for double-blister contour packages for Tek denture brushes. And another contract packager is using the same edging on new Hazel Bishop lipstick card packages now being made with acetate front and back, contoured in front to give striking display to the lipstick itself—and on other Hazel Bishop cosmetic items.

It should not be necessary to point out that the interrupted seal cannot be used when a hermetically





**Multiple units** are manually assembled in special trays. Photo shows assembly of Dura-Gloss package consisting of top and bottom thermoformed pieces, between which lipstick and two die-cut, printed pieces of board are placed.

**Sealing-die operator** places trays under sealing unit as they move around turntable. Multiple units are separated by steel rule dies in the punch presses.

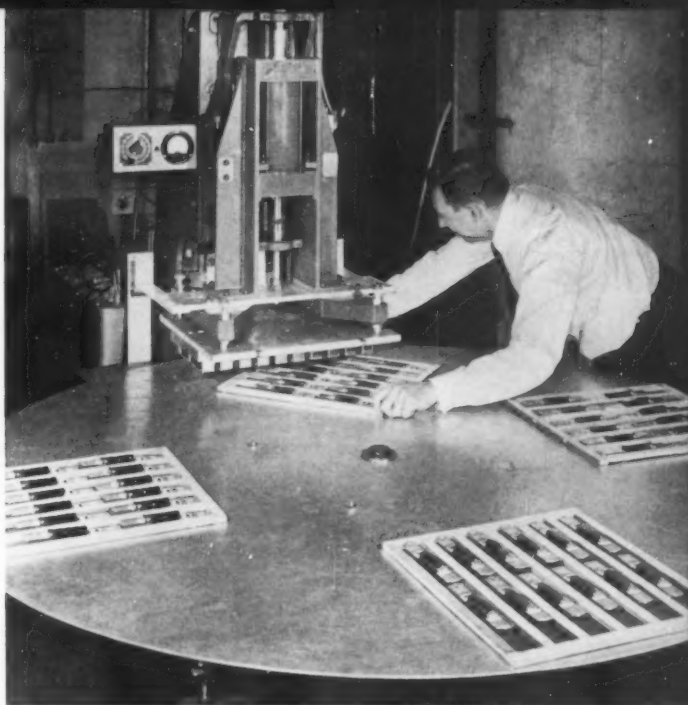


PHOTO: THERMATRON

sealed package is required, since this type of closure provides no seal at the interstices.

As every engineer knows, the capacity of an electronic sealing machine is calculated by the area of the electrode touching the material. Taking a cue from the interrupted line previously used in electronic sealing to simulate stitching, the design engineer for the supplier of the Dura-Gloss packages discovered that he could get twice as much sealing

distance by interrupting the seal line every eighth of an inch and using specially designed serrated sealing dies for the purpose.

Surprisingly, the pattern formed by the serrated die produced a pleasing-looking edging. Thus, it provides an attractive finish when welding together two vacuum-formed blisters of 0.015 cellulose acetate between which are comfortably positioned the handsome Dura-Gloss metal lipstick case and two separate die-cut and printed cards carrying brand identity, price and product information.

It also provides a pilferproof package suitable for rack hanging, in which the lipstick is visible from all angles, yet cannot be removed without destroying the package. (For outlets which specify an open package for customer examination, however, the Dura-Gloss package is modified to provide an open section in the back blister.)

Tek-Hughes was attracted to this package construction not only for its appearance, but for the functional aspects of front and back contours, which can be formed to show off the different-shaped bristles on the opposite sides of the brushes.

According to Hazel [Continued on page 302]

**SUPPLIES AND SERVICES:** Dura-Gloss and Tek packages designed and produced by Plastic Artisans, Port Chester, N. Y., using Celanese and Joseph Davis cellulose acetate sheet. Hazel Bishop package produced by Oxzyn Co., 1300 New York Ave., Trenton, N. J., using blisters made by Ve-Alite Plastic Corp., 2700 Nostrand Ave., Brooklyn 10, of Celanese and Joseph Davis cellulose acetate. All electronic sealing equipment by Thermatron Div., Wilcox & Gibbs, 214 W. 39 St., New York 18.

**Open-back blister** is provided on some Dura-Gloss lipstick packages to meet requirements of retail outlets which want unsealed packages for customer examination of products.





## 20% less for frozen food in polyethylene pouches



Convincing evidence of the economy and broad marketing benefits that can be achieved by packaging loose-frozen vegetables in unsupported polyethylene-film pouches is offered by North Pacific Cannery & Packers, Portland, Ore. The company, which represents six area produce growers and packagers, reports that the film pouch costs 20% less than would a comparable-content carton with overwrap.

Economy aside, the 2-mil film package has opened the door to new markets. As in previously reported applications (see "Frozen Food in Bags," MODERN PACKAGING, Feb., 1959, p. 104), the pouch is used for family-size, 2-lb. quantities. If the entire content is not required for a meal, the pouch can be reclosed for freezer storage of the unused portion. The features of larger quantity, easy pouring and storability also have achieved wide acceptance among institutional users, the company says. Pouches are automatically formed, filled and sealed at a reported speed of 44 per minute. Large unprinted areas on the film packages capitalize on the proved sales appeal of product visibility. "Compak" former, filler, sealer by Hayssen Mfg., Sheboygan, Wis. Polyethylene film by Pollock Paper, Dallas 22, Tex.

## COST

### Protection at bargain cost

How creative package engineering, given the same basic packaging material, can slash material costs and production time is illustrated in the experience of Magnus Organ Corp., Livingston, N.J. The company manufactures an electric organ which requires extreme protection in the shipping carton to insure damage-free arrival.

In its former case-packing operation, the packager used a top-loading, 275-lb.-test, double-wall corrugated shipper and six sheets of interior corrugated cushioning. Although it filled the bill, the container was costly and set-up time was excessively long. Magnus reports a 25% reduction in material cost and a saving of more than 80% in packaging time since switching to an end-loading corrugated carton with only two pieces of cushioning. The two pieces are sturdy corrugated-board "collars" which slip over each end of the organ. In the carton, they suspend the instrument to guard it against shock from all six sides. The superior protection afforded by the new interior packaging, says Magnus, also permits the use of lower-cost, 200-lb.-test corrugated containerboard. *Shipping carton and interior packaging by Mead Containers, 4927 Beech St., Cincinnati 12.*







## Economy in a coated fibre can

Long-term protection against moisture is a critical requirement in the packaging of many consumer and industrial products. The McKay Co., Pittsburgh, has achieved such protection for welding electrodes via the adoption of a polyethylene-coated, metal-end fibre can. In the bargain, the sturdy new container is credited with slashing the company's packaging costs by 50%.

Formerly, the electrodes were packaged in metal cans, which provided an adequate safeguard against the detrimental effects of moisture. However, both an outer and an inner shipping carton were required to protect the products from shock damage in shipping and handling. The rigid, plastic-coated fibre can not only affords improved moisture protection, says McKay, but it also stands up better under rough handling. Thus, only one shipping carton is now needed to carry the electrodes safely to their destination.

According to the packager, continued moisture protection is achieved after first opening by sealing the cap to the can body with a strip of pressure-sensitive cellophane tape. *Fibre can by Ohio Paper Products, Massillon, O. Paper label by Standard Packaging's Allegheny Label Div., Cheswick, Pa.*

# CUTTERS

## Plastic bottle cuts costs 60%

A packaging-material cost reduction of almost 60% is just one advantage reported by J. T. Baker Chemical Co. since adopting a thin-wall, high-density polyethylene gallon bottle for hydrofluoric acid. The blow-molded container, supported by a corrugated carrier-dispenser carton, is economical enough to be thrown away after one use. It replaces an unsupported, returnable, heavy-wall polyethylene bottle.

The packager points out that the disposability feature of its new low-cost container eliminates two former problems: storage of empties by users, and pick-up and cleaning by Baker. In addition, the lightweight bottle achieves substantial shipping-cost savings. Greater handling ease is another advantage cited for the new bottle. Its rectangular shape enables it to fit snugly inside a corrugated carton. The bottle is held in place by a die-cut corrugated sleeve that locks into the bottom of the outer carton. The top of the carton is removable by means of a tear tape, to convert the shipping unit into a convenient dispenser without having to remove the plastic container. *Polyethylene bottle by Plax Corp., Hartford, Conn. Carton and sleeve by West Virginia Pulp & Paper's Hinde & Dauch Div., Sandusky, O.*







**One-hand facility in use is strong selling point** for Morton's new polyethylene shakers for salt and pepper. Hinged lid with locking nib is molded integrally with shaker body and three-hole cap. Only separate piece is a bottom disk of foil-laminated paperboard.

## Polyethylene molded in miniature



*One-piece molding of hinged-lid shakers, with high-speed filling problems solved, enables Morton Salt to use plastic at cost equivalent to that of paper*

**N**ow appearing on food-store shelves in Arizona and slated for gradual national introduction is a new Morton Salt Co. miniature container injection molded from low-density polyethylene. This new container supplements Morton's miniature spiral-wound fibre can with polystyrene lid.

This new "snap-top" container is noteworthy for:

1. An ingenious all-in-one molded construction of body, shaker cap and lid (three separate parts in the fibre package), allowing easy opening and closing with one hand. (A foil-laminated paperboard bottom disk completes the package.)

2. High-speed handling in packaging, which is an outstanding achievement in view of the small size of the light, plastic container (only  $1\frac{3}{8}$  in. high). Filling rate, which is controlled by the printing speed, is 200 units per minute.

3. Improved water-vapor protection and virtually no package breakdown even when the container is subjected to the most extreme weather conditions.

All of this is being accomplished, Morton says, at a unit cost no higher than that of the fibre package. In the general trend toward establishment of plastics as the lowest-cost packaging materials,



Morton's package is another significant milestone.

With its new container, Morton's salt miniature acquires a logical running mate—pepper. The company developed a different type of individual pepper container last year for institutional use,\* but in its new brown, yellow and off-white shaker, this is the first pepper product designed by Morton Salt Co. for the consumer market.

The miniature packages—handy for picnics and lunch-box use—are sold in multiples (six for salt, three for pepper) in cellophane-overwrapped trays.

In appearance the new polyethylene containers for salt are very similar to Morton's fibre cans, for quick identity. The tube holds 4/10 oz.; its blue color, white lettering, Morton-girl trademark and yellow lid are modeled after Morton's large 26-oz. package and the 4-oz. Morton salter for table use. The pepper miniature container holds 1/6 oz.

A portion of the lid of each container is hinged to snap up, disclosing a recessed section with three shaker holes. A tiny nib on the bottom of this hinged flap fits securely into the front hole when the container is closed. This design permits positive one-handed action. The fibre package has a disk lid that has to be turned by the other hand.

The new hinged flap extends less than  $\frac{1}{32}$  of an inch beyond the tube, but this slight overhang is enough for the thumb to snap the container open when it's held in the fingers of the same hand. Conversely, the flap can be lowered and snapped into place with simple thumb action.

The containers are produced at a rate of about

48 per minute by a standard injection-molding method, using standard side core and stripper plate. For this miniature, the containers are molded of bright yellow resin, but even in this vivid hue there is an even color dispersion. Morton attributes this to a special injection nozzle developed by the molder, who is also the company's contract packager.

#### Production

The molder uses a 16-cavity mold and averages three cycles a minute. The containers are ejected into a trough leading to a corrugated container, holding about 3,000 units, where they are stored at least 24 hrs. to allow for shrinkage, which insures positive closing of the lid.

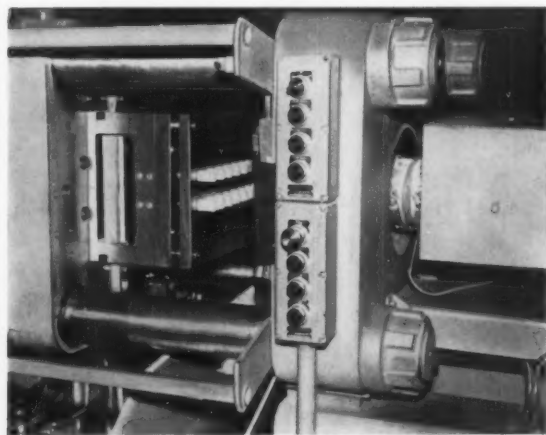
After storage the containers are inspected, closed and aligned in a conveyor for the next operation. This operation, now manual, will shortly be mechanized with equipment—designed in the plant—which is expected automatically to place the miniature containers on the line, close the lids and orient them so that all tops face in the same direction.

Product filling is done through the open base, on a special rotary drop-feed filling machine capable of handling 400 miniatures per minute (although the present requirement is only 200). The bottom disks of foil-laminated paperboard, punched from roll stock, are inserted automatically, six per cycle, snapping into a circular undercut in the container.

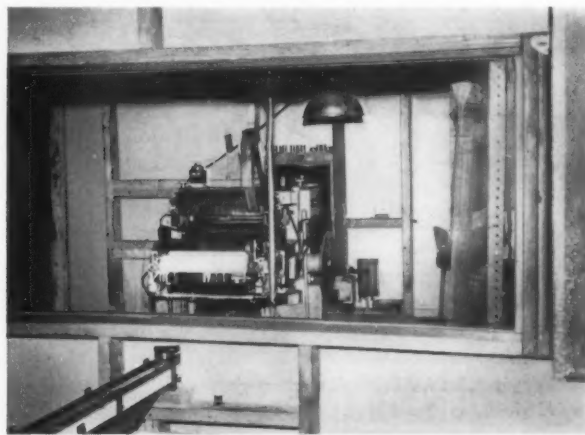
Cans are then manually loaded into paperboard trays and are overwrapped and heat sealed in cellophane. By making the elevator smaller and adjusting the clearances, the packager's standard overwrapping machine was modified to handle the nar-

\*See "1,000 Per Minute Thermoforth," MODERN PACKAGING, Oct., 1958, p. 116.

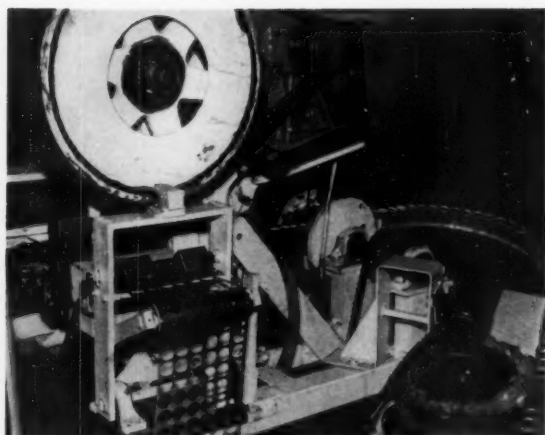
**Molded** in groups of 16 with flaps open, containers are shown here ready to be ejected by vertical stripper plate into trough below.



**Printed** in this dustproof room, containers are conveyed outward through small opening in the front wall. Printing rate is 200 per minute.







**Bottom plugs** of foil-laminated chipboard are snapped in place by this specially built machine. Finished cans move off past vacuum dusting brush (right foreground).

row pepper tray, which is slightly more than 1 in. wide. The equipment can be switched from the handling of double rows of salt containers to the single row for production of the pepper containers, or the reverse, in less than 15 minutes.

#### Container development

Morton's packaging challenge is obvious when one realizes that even in an era of steadily rising food prices, salt still retails at only 11 to 13 cents for the standard 26-oz. unit. (Both the salt and pepper miniatures sell for 19 cents a package). With this very low profit ratio, the company's packaging department must make an up-hill struggle for package excellence at the least possible cost.

Primarily designed for picnic and lunch-box use, the new containers must resist water vapor when

placed near warm foods or near cold foods that steam on exposure to the heat of a radiator or the sun. While the addition of a polyethylene coating to the fibre material several years ago had lowered the WVTR rate more than 50%, there was still room for improvement. With the all-polyethylene container, WVTR has been substantially lowered.

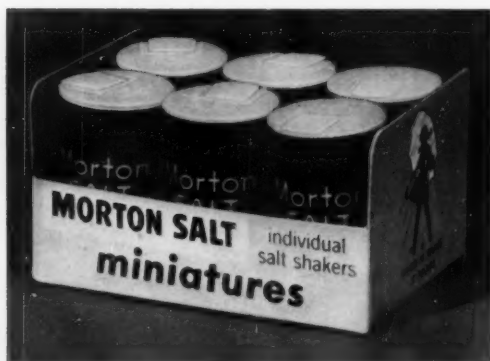
#### Problems

Morton had originally intended to duplicate in polyethylene the design and construction of the fibre package. It was soon found, however, that the multiple molding job necessary—body plus revolving disk—would exceed the budget allowance and cause insertion problems. The new all-in-one polyethylene package stemmed from a desire on the part of the company to pare unit costs to a minimum.

Morton's packaging people freely admit that the new container has presented a series of trying problems, not all of which have been satisfactorily solved.

The yellow color required for the salt shakers caused one of the biggest headaches. During the developmental stage, cans were molded in clear polyethylene and successfully printed by hand with rubber plates and oil-base inks in two colors. But Morton's merchandising people [Continued on page 286]

**SUPPLIES AND SERVICES:** Container developed and molded by Ken Hagen Mfg. Co., Shelburn, Ind., using Dow's low-density polyethylene resin and Interchemical's flexographic inks. Rotary drop-feed filler, machine for punching and inserting bottom plugs and contract packaging by Ken Hagen Mfg. Foil-laminated chipboard for bottom plugs by Federal Paper Board's Morris Paper Mills Div., 7 S. Dearborn St., Chicago 3. FA overwrapper by Package Machinery Co., East Longmeadow, Mass. Cellophane by Du Pont. Paperboard trays by Richardson Taylor-Globe, 4501 W. Mitchell Ave., Cincinnati 32.



**Tray packs** hold six salt or three pepper shakers overwrapped in cellophane. Salt shakers are Morton's traditional blue, yellow and white. New pepper item is brown, yellow and white.





Look forward  
to seeing new and beautiful  
displays of exciting  
set-up boxes, folding  
cartons and transparent  
containers... meet  
us at Booth 649

#### **F. N. BURT COMPANY, INC.**

R. J. Lowe, Vice-President and General Manager

\*O. W. Honsberger, Sales Manager, Set-Up Division

\*A. W. Buchanan, Manager, Folding Carton Division

A. P. Diebold, Plant Superintendent

John N. Brown, Mechanical Research

R. Weinig, Superintendent, Folding Carton Division

C. Heerwagen, Chief Estimator

\*Linda House, Designer

\*Will be in our booth at the show to greet you.

#### **Regional Representatives:**

##### **NEW YORK CITY & MANHATTAN**

J. Rau  
H. H. Boscowitz  
F. V. Kraus, Jr.  
630 Fifth Avenue, Room 1451  
New York, New York  
Columbus 5-7685

##### **NEW YORK STATE (Outside of New York City)**

W. E. Cook  
P. O. Box 995  
Buffalo 5, New York  
Murray 2345

##### **BUFFALO, NEW YORK**

A. Sorenson  
Franklin Cowan Company, Inc.  
210 Ellicott Street  
Buffalo, New York  
Washington 5954

##### **ROCHESTER, NEW YORK**

H. P. Wareham  
P. O. Box 262  
E. Rochester, New York  
Udlow 6-3504

##### **NORTHERN NEW JERSEY**

F. C. Kennett  
P. O. Box 244  
Bloomfield, New Jersey  
Pilgrim 8-4427  
Pilgrim 3-3968

##### **EASTERN PENNSYLVANIA & SOUTHERN NEW JERSEY**

W. C. Hartman  
P. O. Box 63  
Moorestown, New Jersey  
BEImont 5-0286

##### **BOSTON, MASSACHUSETTS**

J. Ansell  
825 Summer Street  
So. Boston 27, Mass.  
So. Boston 8-1102

##### **NEW ENGLAND**

Maurice Kurhan  
c/o Hamilton Process Co.  
610 Atlantic Avenue  
Boston, Massachusetts

##### **CLEVELAND, OHIO**

A. C. Foster  
4040 Mayfield Road  
Cleveland 12, Ohio  
EVERgreen 2-7555

##### **CHICAGO, ILLINOIS**

C. A. Hammond  
T. G. Hogan  
919 N. Michigan Ave., Rm. 1632  
Chicago 11, Illinois  
SUPERior 7-2829

##### **ST. PAUL & MINNEAPOLIS, MINNESOTA**

J. E. Moor  
J. L. "Bud" Moor  
3329 Dupont Avenue, S.  
Minneapolis 8, Minn.  
TAYlor 4-5309

##### **ST. LOUIS, MISSOURI**

Marvin Yates Company  
Siteman Bldg., Suite 424  
111 So. Bemiston Avenue  
St. Louis 5, Missouri  
PARKview 6-0296, 7, 8

##### **CINCINNATI, OHIO**

R. F. Spicker  
P. O. Box 6  
419 W. Fifth Street  
Cincinnati 30, Ohio  
MAIn 0367

##### **LOUISVILLE, KENTUCKY**

J. C. Stone  
1218 Heyburn Bldg.  
Louisville, Kentucky  
JUNiper 2-1805

##### **INDIANA**

Gene Bowen  
909 E. 38th Street  
Indianapolis, Indiana  
WALnut 4-2623

##### **LOS ANGELES, CALIFORNIA**

Gabler & Gabler  
435 So. LaCienega Blvd.  
Los Angeles 48, California  
BRAdshaw 2-2995

F. N. Burt Company, Inc. Manufacturers of Small Set-up Boxes, Folding Cartons, Transparent Containers. 2345 Walden Ave., Buffalo 5, N.Y.  
Offices in Principal Cities or Write Direct. Canadian Div.: Dominion Paper Box Co., Ltd., 250 Islington Ave. S., Toronto 18, Canada





## BAYUK carries the ball

*Three-dimensional  
plastic baseball symbols  
and action sports shots  
on inside-cover labels  
of Phillies cigar boxes  
do a sales-building  
promotional job  
and save on display costs*

**Combination** of printed PVC baseball model and exciting scene at home plate converts inside-cover label of Phillies cigar box into a point-of-purchase poster that promotes Bayuk's sponsorship of Big League baseball games on radio and television.

Integration of consumer packaging with radio and television sponsorship of sports events is paying handsome dividends to Bayuk Cigars, Inc., Philadelphia (3,200 employees; \$53-million gross). Since the company began a coordinated packaging-advertising program late in 1958, sales of Phillies cigars have risen by more than 50%.

In this era of intense brand competition, the Bayuk story should be of interest to every packager whose product is pre-sold by advertising and then must trigger a favorable response from shoppers amid a confusion of competing packages.

Bayuk's basic device for promoting its sports-events sponsorship at the point of purchase is a photographic paper label which is mechanically pasted over the standard label inside the hinged cover of the Phillies "Duo-Pak" box. (The "Duo-Pak," in 50, 100 and 150 count, contains both loose cigars and five-packs.) Various such labels are used, each of which depicts an action sports scene representing an event sponsored by the firm on radio or TV. Brief copy identifies the program and medium on which it is carried. The labels are black and white for larger boxes, color for the 50-count box.

In addition to sports labels, the company last summer adopted three-dimensional plastic forms, which also are machine glued to the inside of the box cover. The first of these is a two-color hemispherical model of a baseball to call attention to Bayuk's sponsorship of Major League baseball on radio and TV. It is vacuum formed from 17.5-mil white polyvinyl chloride and silk-screen printed in red. On smaller boxes of Phillies, the baseball symbol appears alone; on larger boxes, it is used together with a photographic label.

The packager reports that its 3-D plastic baseball has proved so successful in spurring sales, it may extend the idea to other "sports packages."

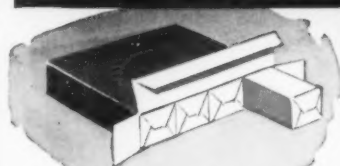
Bayuk concedes that the use of paste-over labels and plastic symbols adds to the cost of packaging. But healthy sales and elimination of the need for additional point-of-purchase materials more than make up the cost difference.

This packaging philosophy is summed up by advertising manager Magnus Hendell: "In light of the fact that there are so many products competing for window and counter space and for streamer, counter-card and other exhibit space, we find that we are assured of point-of-purchase advertising only when it is combined in the actual package."

**SUPPLIES AND SERVICES:** Plastic baseball symbol by Feder Industries, 514 W. 57 St., New York 19, using Bakelite PVC. Labels by National Label Co., 19 St. & Indiana Ave., Philadelphia 32, and Drake Press, 333 S. Broad St., Philadelphia.



## IF YOU PACKAGE...



**BUTTER, OLEO**



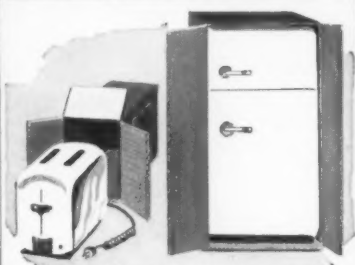
**NUT MEATS**



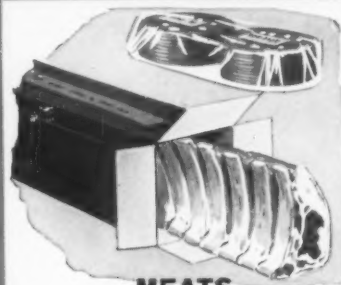
**MILK, JUICE**



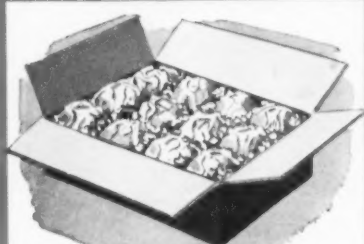
**FURNITURE**



**APPLIANCES**



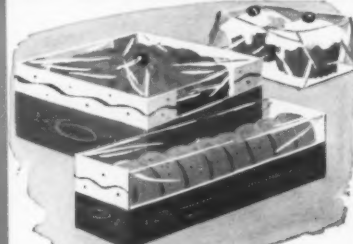
**MEATS**



**FRESH VEGETABLES**



**FLOWERS**



**PASTRY**

# AC<sup>®</sup> Polyethylene

## CARTON COATINGS OFFER 7-WAY PROTECTION

- No more fiber scratch
- Improved scuff resistance
- Higher chemical resistance
- High grease resistance
- Better gloss
- Moisture resistance
- Reduced rub-off



If grease, moisture or fine finishes present packaging problems for your product, here's how you can pack and ship them safely without recourse to costly carton liners:

Incorporate A-C Polyethylene into your present carton-coating operation! It will eliminate fiber scratch and scuffing, give your cartons adequate resistance to grease, water and chemicals.

A-C Polyethylene can save you money, too. When you add it to ordinary wax coatings, *penetration is drastically reduced*, resulting in less wax consumption. For example, with straight paraffin, the normal coating weight is 7-8 lbs./1000 sq. ft. With addition of A-C Polyethylene, *it is frequently reduced to 3-5 lbs./1000 sq. ft. with superior protection!*

**Write for literature, free samples.** Free samples and technical data are now ready for your evaluation. Just write us at the address below. Or ask your local Semet-Solvay representative for a demonstration in your own plant. He can show you, right on your own equipment, how A-C Polyethylene can improve your cartons, save you money at the same time! *Contact us for the names of processors in your area who make up blends of A-C Polyethylene and wax.*

## SEMET-SOLVAY PETROCHEMICAL DIVISION

Dept. 572-L, 40 Rector Street, New York 6, N. Y.  
National Distribution • Warehousing in Principal Cities







Your challenge of the *EXCITING 60's*

## — MORE QUALITY-MINDED CONSUMERS!

LET ANCHOR HOCKING QUALITY PROTECT THE QUALITY OF YOUR PRODUCTS, AND INCREASE THEIR APPEAL FOR THE CONSUMER OF THE 60's!

Marketing consultants forecast a new trend in customer buying during the decade of opportunity ahead. Because consumers will have more money to spend, they will be looking for higher quality in the products they buy.

To win your share of these consumers during the 60's your products may well need the benefit of glass packaging, which highlights product quality. Anchor Hocking offers opportunities to meet this marketing challenge through effective use of Anchorglass® packages, produced under rigid quality controls.

From the selection of all raw materials used in manufacture to the final product inspection, Anchor Hocking employs literally hundreds of exacting controls, tests and checks daily. All this is done but for one reason — to provide you with uniform, high quality glass containers and closures that will give you high speed production and dependable protection for your products. Anchor Hocking Glass Corporation, Lancaster, Ohio.

## ANCHOR HOCKING

*Get set for the exciting 60's  
with Anchorglass Packaging — put  
an Anchor Man on your team*





**Clean and White  
Inside and Out**

**Stiff and Snappy  
For Easy Filling**

**Costs Less Than  
Bleached Sulphate**

**In Thicknesses  
of .012 to .030**

**Clay Coated,  
Best for Gloss**

## **Ridgelo "White Bak" Boxboard—**

**For Better, Less Costly, and More Attractive  
Cartons Clean and White Inside and Out**

The "inside story" of cartons is often as important to repeat sales as the "outside story" is to first sales. This is particularly true in the food, drug, cosmetic, and beverage fields . . . where the impression of clean packaging is *important* when customers open the cartons. Ridgelo "White Bak" boxboard gives that asset to folding cartons, and it is superior to bleached sulphate boards in every important way. White Bak's clay-coated printing side is more attractive and reproduces better. White Bak has greater stiffness and bursting strength, more rigidity and snap, which are desirable filling operation qualities. And White Bak is available in thickness of .012 to .030, at very favorable prices. Compare it!

*Write for Free Samples and Interesting Test Reports*



**LOWE PAPER COMPANY**

**RIDGEFIELD, NEW JERSEY**

**REPRESENTATIVES/** *Detroit—Joseph P. Giroux / Los Angeles—Norman A. Buist / Philadelphia—Philip Rudolph & Son, Inc. / St. Louis—A. E. Kellogg*



# Technical & Engineering

Charles A. Southwick, Jr., Technical Editor

Robert J. Kelsey, Engineering Editor

## A study in machine development

*Increasing requirements for speed in cutting and applying pressure-sensitive tape lead through three stages to a machine with apparently unlimited speed potential.* By Walter C. Larsen\*

**D**evelopment of a machine that would make 2,000 applications per minute of a precisely cut length of pressure-sensitive tape to a moving object—such as a package or article to be labeled, unitized or covered, or a moving web of material—presented an unusual problem in machine design for equipment applicable to the packaging field.

Through various stages of such a project, with increasing demands for speed, we arrived at a machine, involving a vacuum-wheel applicator, that would meet these unprecedented requirements—and that, through the principles utilized, suggested capabilities of almost *unlimited* speed potential.

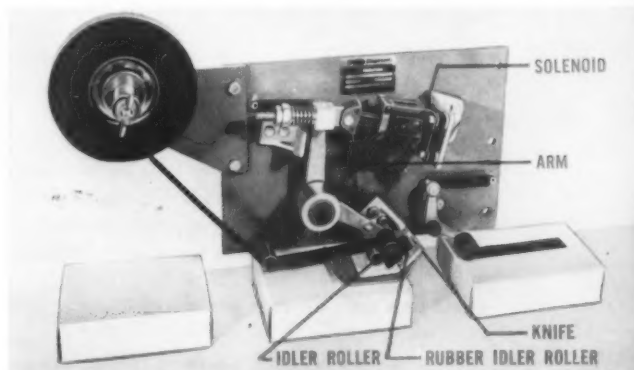
### Preliminary stages

We had already developed two machines, both of which are in use today, for the application of pressure-sensitive tape to flat surfaces.

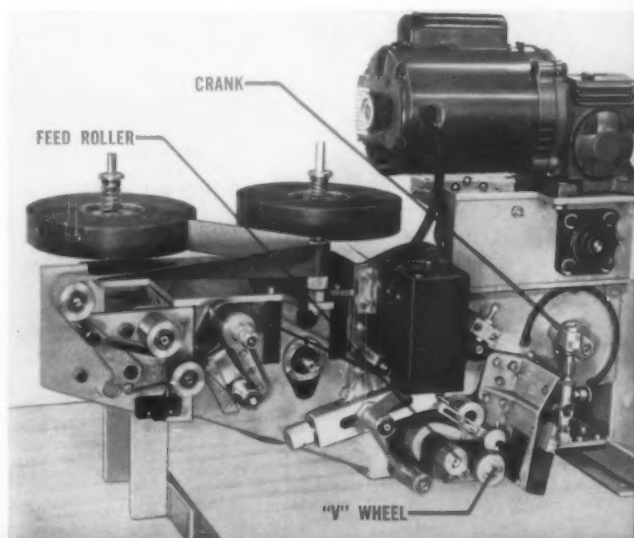
The first machine was the Flat Surface Applicator (FSA), which is shown in Figure 1. It will apply tape to moving packages if they are flat and reasonably rigid. It consists of a solenoid-operated arm which is rotated about a pivot. On the opposite end of the arm are two idler rollers. The adhesive side of the tape travels over the first roller and the back-

\*Tape Customer Engineering, Minnesota Mining & Mfg. Co., St. Paul, Minn.

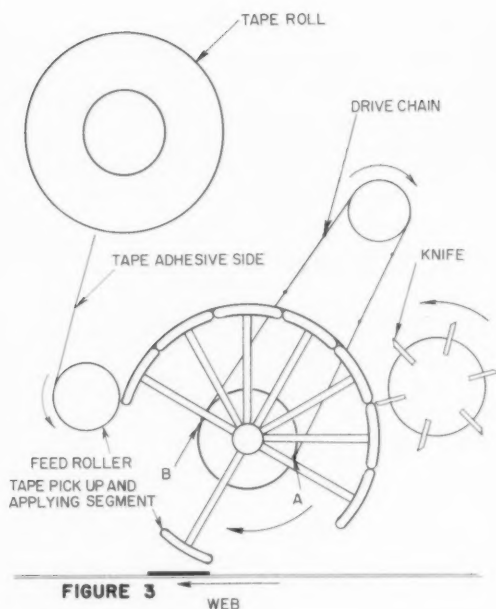
**Figure 2.** Second development, the Pad Applicator, introduced "V" Wheel Feed System, a power stripper to pull tape from roll, and other improvements. This machine is capable of 300 applications per minute.



**Figure 1.** First development, the Flat Surface Applicator, would make 75 applications of tape per minute to packages moving up to 200 ft. per minute.

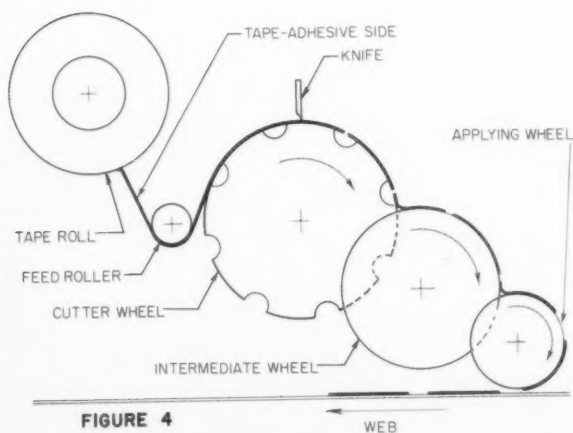






ing side travels under the second, which is rubber. On application, the tape is wedged between the rubber roller and the moving object to which it is to be applied. The tape, because it is pressure sensitive, instantly adheres to the object, the motion of which pulls the tape through the machine. When the desired length has been applied, the solenoid is de-energized, which allows the arm to rotate the rubber roller away from the object. The moving object then pulls the tape into a stationary serrated knife which cuts it.

The original FSA made about 30 applications per minute to objects moving at about 75 ft. per minute. Today, the same machine will make 75 ap-



plications per minute to objects traveling at a rate of up to 200 ft. per minute.

This increase in speed was the result of three major improvements made in the machine:

1. A method of pre-stripping the tape, enabling a  $\frac{1}{4}$ -in. length of tape to adhere to the object before the tape is pulled through the machine from the roll. This eliminates delamination of the object at the point of application by greatly lowering the starting inertia of the tape web.

2. Better and sharper serrated knives, obtained by crush grinding.

3. Better solenoids, which operate in any position and at higher speeds.

The second machine we developed was the Pad Applicator, shown in Figure 2. Its design was the result of customer requests for much greater speed of application; original requests were for twice the speed of the FSA. We decided upon the development of an entirely new machine because:

1. It did not seem economically sound to try to squeeze the last bit of speed potential from the FSA.

2. We needed a machine that would pre-feed the tape before it was to be applied, thus eliminating delamination of the surface to which the tape is applied—still a fault in the FSA when it is operated much above its specified speed range.

3. It was also desired that the machine be capable of applying tape to a stationary surface.

Our first move was to feed the tape with our already-developed "V" Wheel Feed System, which operates in the following manner:

Tape is fed with the adhesive side contacting a straight knurled feed roller which pulls the tape from the roll. It is then fed over the "V" Wheel groove, which, as the name indicates, is "V" shaped in its cross-section. A mating Teflon roller holds the tape in the groove. The "V" Wheel makes the same number of revolutions as the feed roller, but is larger in diameter, thus has a higher peripheral speed which keeps the tape from following around the feed roller. Ratio of the "V" Wheel root diameter to the feed roller outside diameter is 1.107:1. The basic idea is to form the tape so that its cross-sectional shape is like that of an angle iron, with enough rigidity for unsupported feed.

On the Pad Applicator, the "V" Wheel System cantilevers the tape through a crank-and-slider shear assembly. The slider carries both the moving knife and a platform, or pad, which, in turn, carries the cut length of tape to the object and applies it in place. To get higher operating speeds, the "V" Wheel System used to feed the tape is also operated by a crank and slider, which affords a good acceleration/deceleration curve. By adjusting the throw on the crank, the tape length is changed. The



two crank-and-slider systems are driven by the same source to do away with timing problems.

The first Pad Applicator applied tape up to 1 in. wide and  $3\frac{1}{2}$  in. long, and easily met a speed requirement of 150 applications per minute. In the two years it took to complete the development, however, many customers increased their line speed and required 200 or more applications per minute and one particular group of customers required the use of  $1\frac{1}{4}$ -in.-wide tape for their application. Result: The machine had to be redesigned.

Major redesign features made in the machine to achieve these higher speeds were:

1. A power stripper to pull the tape from the roll so that it would not slip on the feed roller.
2. Commutators instead of cam-operated, snap-action switches where photo-electric register controls were used because, at higher speeds, the switches resulted in erratic performance of the photo control.
3. An enlarged overrunning clutch between the feed crank and the "V" Wheel drive train.
4. A friction brake to keep the system from over-running at higher speeds.

The redesign was presented to our customers with a maximum tape-length capacity of  $3\frac{1}{2}$  in., as before, but with the maximum tape width increased to  $1\frac{3}{8}$ -in. capacity.

But, again, as was anticipated this time, one group of customers wanted a machine that would run faster than their previously requested 200 applications per minute. It was demonstrated that the new machine could run at 300 per minute! Design of the equipment had now been pushed considerably ahead of the customers' stated requirements.

Even so, it wasn't long before neither the FSA nor the Pad Applicator could handle the speed requirements of *all* of our customers—despite the continuing success of these machines in specific locations right up to the present time.

At this point, a decision had to be made as to whether to upgrade the Pad Applicator by beefing up and balancing all of its moving parts so that it possibly could be made to run at as high as 500 applications per minute; or whether it would be more practicable to develop another system.

#### Step-up in speed

In gathering information on the machine requirements in order to determine its specifications, it was found that 500 applications per minute would not suffice to stay ahead of all customer needs and would barely keep abreast of production plans for the immediate future. It was decided, thus, to look for an entirely new approach with much more potential. The resultant specifications were as follows:

1. Of many possible applications, that involving

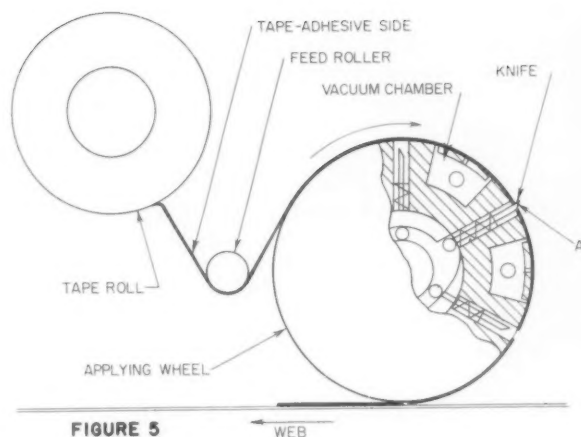


FIGURE 5

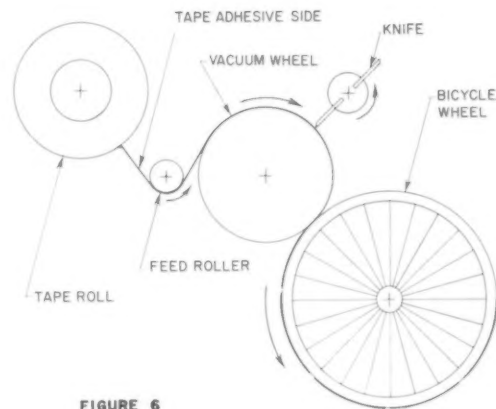


FIGURE 6

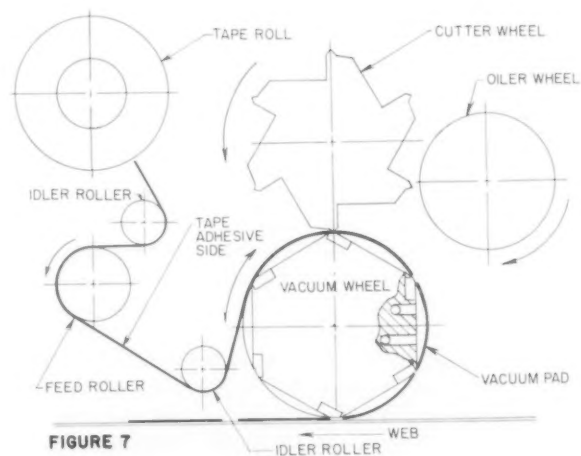


FIGURE 7



bag-making machines required the greatest speed; for example, web speeds of 1,500 ft. per minute and application speeds of 1,500 per minute, also. It was determined, therefore, to aim for 2,000 applications per minute. Any design would be disqualified without further development if its speed of application was not at least 1,000 per minute.

2. The machine must be able to handle and apply all of the 3M major line of pressure-sensitive tapes.

3. Tape capacity must encompass maximum lengths of at least 8 in., minimum lengths of 1 in. and tape widths up to 2 inches. This might be done with two models, provided that both used the same main casting. Other components must be capable of change in the field.

4. Spacing between tape lengths must have some adaptability to adjustment and must be simple and easy for change-over in the field.

5. The machine must be capable of extended spacing through use of attachments or a by-pass system for low number of applications at a high web speed, as in a label applied to a web of waxed paper or a foil at the end of the roll.

6. Placement on a moving web of within  $\frac{1}{64}$  in. would be desirable. Acceptable:  $\frac{1}{32}$  inch.

7. Preferable: a straight cut. Acceptable: a serrated cut. At 2,000 applications per minute, it would be easy to make 1 million applications per day. Thus, knives must last for at least 1 million applications before sharpening is required.

8. It must be possible to maintain register control of printed tape through use of attachments, though not at maximum speeds.

9. It would be desirable to keep the machine to a minimum size, such as 12 in. long and 6 in. wide, or less. Dimensions must not be more than 24 in. in length and 12 in. in width.

10. It must operate in an inverted position.

After looking at various transfer systems that might be used with present tape-feed systems, it was decided that the only way these specifications could be approached would be with a rotary machine.

In other words, this meant that all start and stop mechanisms must be completely eliminated.

### Three approaches

Three approaches to the problem were tried:

In the first, a wheel was divided into segments (see Figure 3). Each segment was equal to the length of tape to be applied. A powered feed roller pulled the tape from the roll. Tape pick-up and applying segments contained vacuum ports to hold the tape. The segment wheel speed was less than the application speed. The chain drive with ratchets represented by the round dot on the chain hooked a segment of the wheel at point A. The tape had already been cut

by the rotating knives moving at the same speed as the wheel. The chain was driven faster than the wheel, thus separated that segment from those directly behind. The accelerated segment had a peripheral speed equal to that of the moving web. As tape held to the segment came in contact with the web, vacuum was shut off and the tape was applied. As the segment approached point B, its vacuum was turned on and it then came into contact with the tape again. Directly at point B, the chain ratchet was released and a clutch joining the segment to the wheel continued to drive the segment.

There was one obvious disadvantage in this design: It required a new and different set of segments for each different length of tape that had to be applied with the same machine.

In the second approach (see Figure 4), the tape again was pulled from the roll by a powered feed roller, with the back side of the tape then held to the cutter wheel by vacuum. The tape was naturally suspended across the half-round relieved spaces on the periphery of the cutter wheel for entry of a single knife with reciprocating action, as shown, or a rotating knife (as in Figure 3). As the cut length of tape on the cutter wheel contacted the intermediate wheel, it was picked up by a faster, higher vacuum and slid off the cutter wheel. The increased speed created a larger separation from the following length of tape. This process was repeated when the tape contacted the still-faster applying wheel with its still-higher vacuum, making for an even larger spacing between lengths of tape. Application of tape to the web was the same as with the segmented wheel.

Big problem here, however, was with the cutter wheel. Because relief spaces were required for the knife, only tape lengths equal to multiples of these spaces could be cut, even though individual knives could be removed or replaced on the rotating knife assembly to match the spacing. The relieved spaces thus seriously limited tape-length adjustments and required a number of wheels to cover the range of tape lengths set up in the specifications.

It was this problem of tape lengths and the inability of either of the systems so far designed to solve it that led at this time to the abandonment of their further development.

A third approach was now tried, with the tape again pulled from the roll by a feed roller and the backing side then fed onto a vacuum wheel, but the cutting arrangement was different: Inside the vacuum wheel, equally spaced, were spring-loaded knives (see Figure 5). At point A, the knife was released from the cam and its spring action snapped it through the tape. The knife was then cammed back into the applying wheel just before it came into contact with the moving web of tape. The



**Figure 8.** Final development, vacuum wheel dispenser, showing taping head of a pre-production model. Application speeds as high as 3,500 applications per minute have been successfully run. This photographic view corresponds to Figure 7 drawing.

vacuum holding the tape was again turned off at the point of application.

More than either of the others, this system *felt* like the answer—although adjustment for spacing and tape length still remained unsolved.

### Solution

Then came a major breakthrough: It was suggested that the tape be slipped on the vacuum wheel of this system as it had been slipped from wheel to wheel in the system just preceding (see Figure 4). Adjustment of tape length could then be obtained by changing the ratio between the feed roller and the applying wheel!

A model was built (see Figure 6) consisting of a feed roller to pull the tape from the roll and a vacuum wheel with holes drilled around its entire periphery, but spaced so that the rotating knife would not contact the wheel at a hole. The tape was crush cut, by letting the rotating knife contact the wheel with zero clearance. There were two knives on the cutter wheel. The vacuum wheel was 6 in. in diameter and the feed roller 2½ inches. The tape was applied to a bicycle-wheel tire. By changing sprockets on the chain linkage between the feed roller and the vacuum wheel, it was possible to change the length of the applied tape.

The first time the model was tried, it was run at a rate of 1,000 applications per minute, cutting a 4-in. length of tape.

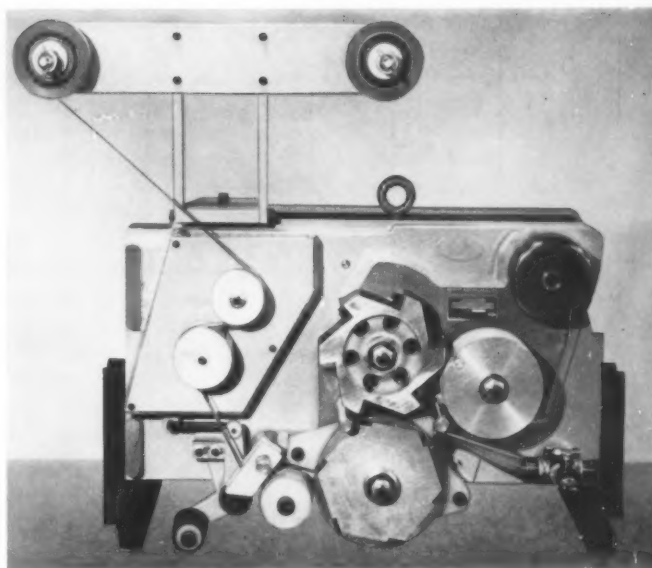
As more tests were run, it was found that the saturants used on some of the tape backings gradually left a residue on the vacuum wheel, over which they must skid.

It was also found that the model could not cut less than a 2-in. length of tape because the tape stuck fast enough to the cutting knife to overcome the pull of the vacuum.

These problems were approached one at a time:

1. *Saturant transfer.* The vacuum wheel was grooved to cut down the surface area. The vacuum holes were relocated many times. Still, the backing saturants continued to transfer to the wheel. Teflon tape was tried on the periphery of the wheel. This finally did the job, although its use resulted in complicating the wheel design.

2. *Sticking to the knife.* To get better holding of the tape to the wheel, various spacing of the vac-



uum holes and various-sized holes and various degrees of vacuum were used. Two vacuum sources were tried, because a lower vacuum applied to the tape before it was cut decreased the power needs and tendency for transfer. The solution, however, came through *oiling the knife*. This required addition of another roller. The oil roller was constructed by wrapping felt around a flanged roller. It was powered to run at the same peripheral speed as the knives. The cutting edge of the knife just "kissed" the oiled felt, leaving such a small deposit of oil on the knife that no trace of it could be seen on the tape. In fact, though it had been assumed that the oil roller would have to be supplied from a powered reservoir, it was found that such a small amount of oil was required that, if oiled only once a day, the knife would never stick to the tape.

The oiled knife solved other problems:

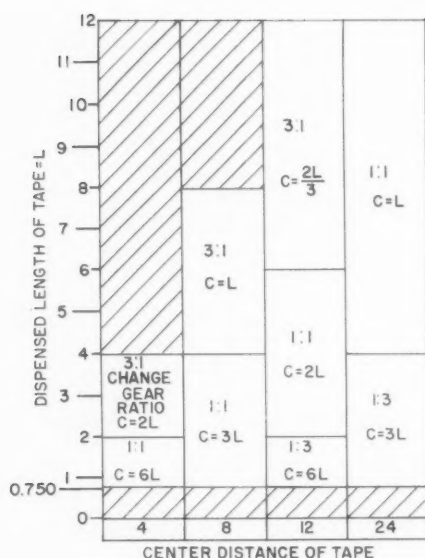
It reduced the pull of the knife on the tape so much that 1-in. lengths of tape were easily cut without being pulled from the vacuum wheel.

Also, it was now possible to go back to the use of a single source of vacuum instead of having to use a low vacuum before the tape was cut and a high vacuum after the tape had been cut.

But, now, it was time to test *all* of these results on a more reliable machine than the test rig.

An experimental model was built over a chain conveyor with small lugs to which the tape was applied. The chain was spring loaded directly under the vacuum wheel so that the lugs could accumulate one application of tape on top of another





C=CIRCUMFERENCE OF FEED ROLLER  
L=DISPENSED LENGTH OF TAPE

BEYOND RANGE  
OF CUTTERS



TABLE I

to a 1/4-in. thickness before the machine had to be stopped to remove the tape. Later, a paper web was put through the machine to afford a longer run.

The model had a feed roller, a vacuum wheel, a four-bladed rotary knife and an oil wheel. The vacuum wheel used a six-sided construction with a 1/4-in.-wide flat knife anvil (see Figure 7). The leading-end edge was ground after assembly. The Teflon vacuum pad was then mounted over the anvil and held in place by countersunk screws. The vacuum wheel had ports machined into its body which led from the manifold to the holes in the vacuum pad. A 1/2-H.P. variable-speed drive was sprocketed for 2,000 applications per minute.

Work on the experimental rig paid off:

1. It was run without encountering any problems at 2,000 applications per minute.
2. The Teflon solved all transfer difficulties for the entire 3M line of tapes.
3. Emergency provisions for double vacuum had been made and were found not to be needed.

The machine was then run continuously without tape to check knife life. (It was known that when tape is used, knife life is generally longer, owing to the tape's cushioning effect; so this test, without tape, was for the purpose of determining a safety factor.) The knives cut well for slightly more than

1 million applications each. This meant that with the four-bladed rotary knife being used, more than 4 million applications could be made before sharpening was required!

It was now decided to try to pin down *maximum speed* of application. The 1/2-H.P. variable-speed drive was sprocketed for 3,500 applications per minute. This run was successful without a hitch. There seemed to be no noticeable increase in strain on the machine. Placement was within about 0.010 in., except where there was drastic speed change of more than 500 applications per minute. As no reason was advanced to try for higher rates of speed, these tests were discontinued.

Accumulated, thus, were the following data:

1. Application speed—2,000 per minute, tested; 3,500 per minute, successfully run.
2. Placement—Within 0.010 in. for any given number of applications per minute, up to the maximum. Within 1/32 in., even when being applied at a rate of from 0 to 3,500 per minute.
3. Machine would apply any tape tested with no saturate transfer to the vacuum wheel.
4. It would apply the minimum 1-in. tape length easily, as well as any width of tape specifically designed into the machine.
5. A straight cut was accomplished. Knife life would be 1 million applications per blade.
6. Vacuum amounted to 16 in. of Hg. gauge, using a 9 C.F.M.-rated pump.

#### Production model

It was now felt that there was enough information to design a production prototype. Four of the original 10 specifications had been tested on the experimental machine. The other six and an additional two were met, as will be shown, and were generally a matter of design and of finding just the right commercial components.

A schematic layout was made of the production model (Figure 8) to meet *all* of the 12 specifications that had been set up, as follows:

1. Speed of 2,000 applications per minute was no problem, as per test.
2. The entire line of major 3M tapes was found easy to handle, including the polyesters. Complete control of the tape was an actuality at all times.
- 3 & 4. Tape length and spacing had become one problem, hence, one specification. By removing knives, it was possible to change the spacing from the leading edge of one length of tape to the leading edge of the following length. Such spacing was a function of the number of knives and the circumference of the vacuum wheel. Rating of the vacuum wheel by circumference rather than diameter was necessary, as any material or packages would prob-



ably be handled by conveyors with chain-driven lugs, and spacing between the packages or lugs would have to be increments of the spacing of the cutters on the vacuum wheel. In other words, if all the blades were used on a six-blade, 24-in. wheel, spacing between blades would be 4 in.; and to operate a conveyor with 4-in. spacing, the chain pitch would have to be  $\frac{1}{4}$ ,  $\frac{1}{2}$  or 1 inch. For this reason, a 24-in. vacuum wheel was selected, which allowed spacing of 24, 12, 8 or 4 in. for six blades, using one, two, three or six blades, respectively (see Table I). By employing two sets of change gears with ratios of 1:1 and 1:3, three possible ratios were obtained: 1:1, 1:3 and 3:1, with a fixed center distance between gears. Table I shows tape lengths obtainable with the various change gears; ratios are indicated in each box. By changing the size of the feed roller, any length of tape can be fed within the illustrated range. The formula for the circumference of the feed roller needed for each tape length is shown in each box in Table I. Example: a 3-in. length of tape on 4-in. center can be obtained by using a 3:1 gear ratio. A 3-in. length would require a ( $C = 2L$ ; therefore,  $C = 6$  in.) 6-in.-circumference feed roller.

5. Spacing beyond 24 in. in multiples of the center distances of four, eight, 12 and 24 was found easy of accomplishment with the use of a single-revolution clutch to drive the feed roller. After an application had been made, the vacuum wheel, cutter wheel and oiler wheel continued to rotate at web speed. The tape slipped on the vacuum wheel. When application was desired, the single-revolution clutch could be solenoid actuated when the circuit was closed by some sort of sensing device measuring web length or travel. Another switch in series with the sensing device would then be normally closed by a cam on the vacuum-wheel shaft to trip the clutch at the point of cut, thus giving it the full time elapsed between points of cut to actuate, feed and cut. Trouble was in finding a simple clutch mechanism. Mechanical clutches were too slow. Electric clutches required a brake and more circuitry than was wanted. Answer to the problem came in a hydraulic, single-revolution clutch made by the W. S. Barnes Co., of Rockford, Ill. It was simple and fast, operating at up to 200 cycles per minute. This was adequate for intermittent operation. As 120 cycles per minute would probably serve most applications, a good safety factor was involved. The clutch was simple to operate in that it required only a single mechanical trip or solenoid. On this application, a solenoid was used.

6. As stated before, placement was within 0.010 in. for any given application speed.

7. A straight, crush-action cut was accomplished.

As remarked in Specification 5 of the test data, knife life was more than 1 million applications per blade. The number of blades was increased to six, which resulted in giving between 6 and 7 million cuts between sharpening.

8. Several photo-electric two-way register control systems were found that would run tape-web speeds up to 750 ft. per minute. Adequate space was allowed between the feed and idler rollers (see Figure 7) to mount the photo tube. The two-way register correction motor fed corrections through a differential into the machine's feed roller.

9. Dimensions of the finished machine were 29 in. long, 20 in. high and 14 in. wide (this does not include attachments). Size was much larger than desired. The original specification was determined by allowable space on corrugators. Without any immediate applications for the machine in the box-board industry, however, it was decided to accept a change in this specification. Cast iron was used for the frame of the machine and included mounting holes on each end.

The entire top surface of the frame was machined to accommodate all of the various attachments—for example, the hydraulic single-revolution clutch, the photo-electric correction motor and the self-contained drive. This machined surface was also calculated to be a handy place to mount any special attachments the user might need.

10. Because vacuum was used to hold the tape in place until application, the tape was in control at all times; therefore, the machine would operate in any position—inverted or on its side.

11. The machine was easy to maintain because the casting was open.

When the knives needed sharpening or the Teflon vacuum pads were in need of replacement, the wheels could be removed and spare parts mounted. Easy knife adjustment by use of back-up screws would keep down time to a few minutes.

12. The oiler wheel, it appeared, would last a long time—probably six months—and the felt could be changed easily in a matter of seconds.

In this way, the test data turned out to be very complete, making for a less-arduous design job than had been expected. Toughest part of the job was at Specifications 3 and 4—that is, deciding on the vacuum-wheel circumference and spacing.

The result was a machine that, for once, was way ahead of customer requirements for speed. It is a machine that is idling at 500 applications per minute! If a market can be found to support the development cost, it is also a machine of almost unlimited speed potential—although, at the moment, popular for much slower applications because of its inherent versatility and simplicity.



# Heat processing vs. permeability

*Study of plastic films shows little effect on gas transfer;*

*WVP decreases in polyolefins; increases*

*in polyester films. By E. G. Davis, M. Karel and B. E. Proctor\**

**T**he permeability of plastic films to gases and vapors is of importance in the determination of their suitability for use in food packaging. The permeability of commercial materials under standardized conditions has previously been adequately reported in the literature.

The heat processing of foods in film containers, however, exposes these films to extreme physical conditions and little information is available on the effect of this treatment on permeability. Hu, et al. (5),<sup>1</sup> and Nelson, Hu and Steinberg (8) presented data on the effects of heat processing on the permeability of Mylar polyester and Trithene films, and also determined the loss of weight during storage of a test pack of apple sauce packaged in containers made from these films.

Some of the important problems encountered during the heat processing of foods in plastic film containers have been investigated and reported in previous publications from this Department (2, 3). This paper reports some observations made on the effects

of heat processing on the gas- and water-vapor permeability of several heat-resistant films and of packages that have been made from these films.

## Experimental procedure

**Materials.** The materials used in this study were obtained from several manufacturers. Several batches of the same type of material were included in the studies. The heat-processed film samples were treated in an autoclave at 250 deg. F. and 15 p.s.i.g. of steam pressure. All film samples were stored at 70-74 deg. F. and 50% relative humidity before being tested.

**Methods.** The permeability of the films to oxygen and carbon dioxide was determined, using a modification of the method described by Landrock and Proctor (7). The apparatus is shown in Figure 1.

Water-vapor-permeability determinations were made on film samples using the standard TAPPI test method (9).

In order to study the water-vapor permeability of completed packages, 4-by-3-in. bags were made by cutting the sheet material, folding and heat sealing it along two edges to form a bag. The heat sealer used was a thermal impulse sealer (Vertrod Model 13-A, Vertrod Corp., Brooklyn, N. Y.). The bags to be tested were then filled with either calcium chloride or agar, as follows:

(a) **Calcium chloride:** Twenty-five gm. of the desiccant (No. 8 mesh) were enclosed in small kraft paper bags and closed with staples. The paper bags were inserted in the film packages and the final heat seal completed. Sufficient packages were made for two treatments, one of which was the control and the other of which was heat processed for 30 min. at 212 deg. F. After the gain in weight during the process was determined, all packages were stored at 100 deg. F. in a desiccator over a saturated solution of  $\text{NH}_4\text{H}_2\text{PO}_4$  (R.H. 91%) and weighed at intervals until a steady rate of water uptake was observed. After removal from the 91% R.H., 100 deg. F. storage atmosphere, the packages were held for 4 hrs. in a desiccator containing solid calcium chloride before each weighing.

\*This is contribution No. 379 from the Dept. of Food Technology, Massachusetts Institute of Technology, Cambridge, Mass. Mr. Davis is now with the Division of Food Preservation and Transport, C.S.I.R.O., Homebush, New South Wales, Australia. Dr. Bernard E. Proctor died Sept. 24, 1959, shortly after the completion of this work.  
<sup>1</sup>Numbers in parentheses identify References appended.

**Table 1:** Effect of heat processing on the gas permeability of packaging films

Film	Thickness (average) mils	Test gas	Permeability at 75°F. and 5% R.H. cc.-mil/24 hrs.-m. <sup>2</sup> -atm.	
			Unprocessed	Processed 30 min. at 250°F.
Polypropylene (cast)	1.4	CO <sub>2</sub>	9,500	9,500
Polypropylene	1.4	O <sub>2</sub>	2,700	2,700
H.D. polyethylene (quenched)	1.0	CO <sub>2</sub>	13,000	11,500
(blown)	1.1	CO <sub>2</sub>	5,400	5,600
(blown)	2.3	CO <sub>2</sub>	7,700	7,300
(quenched)	1.0	O <sub>2</sub>	5,200	4,250
(blown)	1.1	O <sub>2</sub>	2,200	1,700
(blown)	2.3	O <sub>2</sub>	1,800	2,300
Polycarbonate	4.8	CO <sub>2</sub>	8,700	8,100
Polycarbonate	4.8	O <sub>2</sub>	2,000	1,900
Polyvinyl fluoride	0.6	CO <sub>2</sub>	260	270



(b) *Agar gel*: Each bag was filled with 40 ml. of 15% agar solution and closed after the removal of as much air as possible and the agar was allowed to solidify. Weighings were made after the packages had cooled to room temperature. The following three treatments were included in this study:

1. Empty bags heat processed for 30 min. at 250 deg. F. before filling with agar.

2. Filled bags processed 30 min. at 212 deg. F. and the change in weight determined.

3. Control treatment—all bags were then stored at 70-74 deg. F. and 50% R.H., and the loss of weight was determined at intervals.

To determine the change in weight during processing at 240 deg. F., packages made from two films were filled with agar as above and processed for 30 min. at 240 deg. F., using the method described in an earlier article (3). The loss in weight was determined by weighing the packages both before the process and after the process.

All water-vapor-permeability determinations on completed packages were made using triplicate packages for each of the treatments.

## Results and discussion

1. *Effect of heat processing on carbon dioxide and oxygen permeability*. The effect of heat processing for 30 min. in steam at 250 deg. F. on the carbon dioxide and oxygen permeability of several films was studied. The results are presented in Table I. Only small differences in the permeability to CO<sub>2</sub> and O<sub>2</sub> were observed between the processed and unprocessed films. These results are in accord with those of Hu, et al. (5), who studied the effect of processing treatments on the carbon dioxide and oxygen permeabilities of Mylar and Trithene films, and found no appreciable change in permeability as a result of the heat process.

2. *WVP studies on films*. Results showing WVT rate of processed and unprocessed films as determined by the standard TAPPI method (9) are presented in Table II. With the exception of blown, high-density polyethylene, the polyolefin films and the polyethylene-coated polyester films showed a decrease in water-vapor permeability after being heat processed. With all batches of polyethylene terephthalate (polyester) films, the processed samples showed a higher permeability than the unprocessed samples. The permeabilities of polychlorotrifluoroethylene, polycarbonate and polyvinyl fluoride films were not affected by the heat treatment.

It was observed that most of the polyolefin films shrank somewhat during the heat processing. The resulting increase in thickness may account for the decrease in transfer rate, since the calculations of transfer rate were based on the thickness of the

**Table II: Water-vapor permeability of films before and after heat processing**

Film	Thickness (average) mils	Permeability—gm.-mil/24 hrs.-100 in. <sup>2</sup>		
		at 100°F., 91% R.H.		at 73°F.,
		Control	Heat processed (15 min. at 250°F.)	91% R.H. Control
Cast polypropylene	1.7	0.619	0.545	0.162
Blown polypropylene	2.5	0.655	0.640	
High-density polyethylene (water quenched)	1.1	0.491	0.392*	
High-density polyethylene (blown)	1.25	0.283	0.260	0.065
	2.3	0.288	0.271*	
	3.0	0.236	0.255*	
Polyethylene terephthalate (polyester)	0.7	1.85	2.00	
	1.0	1.49	1.93	0.57
Polycarbonate	4.8	5.92	6.04*	
Polychlorotrifluoroethylene (plasticized)	1.1	0.022	0.018*	
(unplasticized)	3.6	0.017	0.018*	
Polyethylene-polyester combination	2.7	1.06	0.603	
Polyvinyl fluoride	2.0	2.34		
	0.6	2.28	2.42	0.64

\*Processed 30 min. at 250°F.

**Table III: Effect of heat processing on the water-vapor permeability of completed packages containing CaCl<sub>2</sub>**

Film	Average gauge (mils)	Water-vapor permeability gm.-mil/24 hrs.-100 in. <sup>2</sup> (at 100°F., 91% R.H.)			
		Unprocessed		Processed 30 min. at 212°F.	
		Range	Mean	Range	Mean
Polypropylene (cast)	1.4	0.50-0.55	0.52	0.50-0.76	0.63
High-density polyethylene (quenched)	1.0	0.43-0.47	0.45	0.35-0.44	0.39
(blown)	1.1	0.23-0.24	0.24	0.21-0.25	0.21
	2.2	0.22-0.22	0.22	0.24-0.25	0.24
	2.8	0.18-0.19	0.19	0.18-0.19	0.19
Polyethylene terephthalate (polyester)	0.5	0.87-0.94	0.90	0.95-0.95	0.95
	1.0	1.0-1.0	1.0	1.1-1.2	1.1
Polyvinyl fluoride	2.0	1.64-1.84	1.71	1.60-1.84	1.73
Polychlorotrifluoroethylene (unplasticized)	3.6	0.02-0.04	0.03	0.03-0.06	0.04



**Table IV:** Effect of heat processing on the water-vapor permeability of completed packages containing agar

Film sample	Average gauge (mils)	Heat treatment	Water-vapor permeability gm.-mil/24 hr./100 in. <sup>2</sup> at 73°F., 50% R.H.	
			Range	Mean
Polypropylene (cast)	1.4	none	0.12-0.14	0.14
		Bags filled and processed 30 min. at 212°F.	0.13-0.14	0.13
		Bags processed 30 min. at 250°F. and filled	0.13-0.14	0.14
High-density polyethylene (blown)	1.1	none	0.054-0.057	0.056
		Bags filled and processed 30 min. at 212°F.	0.073-0.12	0.09
		Bags processed 30 min. at 250°F. and filled	0.053-0.053	0.053
Polyethylene terephthalate (polyester)	1.0	none	0.48-0.50	0.49
		Bags filled and processed 30 min. at 212°F.	0.62-0.62	0.62
		Bags processed 30 min. at 250°F. and filled	0.60-0.61	0.60

samples before heat processing. No differences were observed in the thickness of the polyester samples before and after the heat process.

3. *Water-vapor-transfer studies on completed packages.* Permeability data obtained on film samples under carefully standardized conditions cannot always be applied directly to the calculation of the permeability of completed packages. The heat seals and creases in the film are two of the variables which are likely to influence the calculated results (1). With packages which have been heat processed after filling, the effect of the process on the permeability of the heat-seal areas may introduce further variation.

The results showing the rate of transfer of water vapor through completed packages are recorded in

Tables III, IV and V. Using packages filled with calcium chloride (Table III), only small differences were observed between the processed and unprocessed packages. The transfer rates found with the polyester and polyvinyl fluoride packages were lower than those obtained by the TAPPI method, but the values found for other film packages do not differ appreciably from those found by the standard method. These results indicate that any damage due to impulse sealing has only a minor effect on permeability of packages. This appears to be contrary to the observations of Heiss (4), who found that impulse sealing increases permeability by a large factor. This discrepancy is not surprising, since the films studied by Heiss were not of the same type as those used in this study.

**Table V:** Change in weight of packages filled with calcium chloride and agar solution during processing in steam

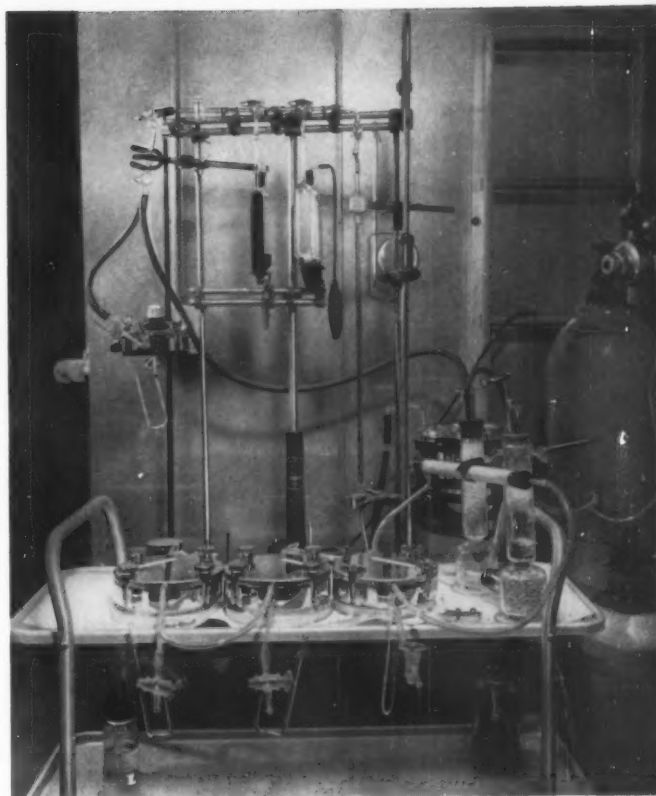
Film material	Average gauge (mils)	Change in weight during processing (g./24 sq. in. package area)		
		CaCl <sub>2</sub> 30 min. at 212°F.	Agar 30 min. at 212°F.	Agar 30 min. at 240°F.*
Polypropylene (cast)	1.4	+0.33	-0.011	-0.030
High density polyethylene (quenched) (blown) " "	1.0	+0.24		
	1.1	+0.13	-0.075	
	2.2	+0.071		
	2.8	+0.048		
Polyethylene terephthalate (polyester)	0.5	+0.54		
	1.0	+0.29	-0.013	-0.11

\*Cooled under pressure.



The water-vapor-transfer rates of packages filled with agar were also determined. These results are shown in Table IV. Heat processing before and after filling with agar had no effect on transfer rates of packages made from polypropylene and stored at 70-74 deg. F. and 50% R.H. With blown high-density polyethylene, the packages which were processed after filling with agar showed a higher transfer rate than those not processed and those processed before filling. Evidence of a higher water-vapor permeability as a result of heat processing was found with polyester packages.

Changes in weight of packages filled with either calcium chloride or agar during heat processing are shown in Table V. With calcium chloride-filled packages, the increase in weight during a process of 30 min. at 212 deg. F. was small compared with the weight of the package content. Polyester film packages (0.5 mil) showed the highest increase and blown high-density polyethylene packages (2.3 mil), the lowest increase in weight. In this test the water-vapor differential across the film was high. This condition would be unlikely in practice, since foods intended for heat processing would be sufficiently high in moisture to saturate the package interior during processing and lower weight losses should occur. The observed losses in weight of packages filled with agar during processing at 212 deg. F. followed by pressure cooling with superimposed air pressure resulted in some increase [Continued on page 283]



**Figure 1.** Apparatus used for the determination of gas permeability by the method of Landrock and Proctor (modified by Karel and Proctor).

**Table VI:** Comparison of permeability constants obtained by standard and package tests at various temperatures

Film	Thickness (average) mil	Temp. °F.	Permeability constant gm.-mil/100 in. <sup>2</sup> -24 hrs.-cm. Hg.		
			TAPPI cup method	Package test	Extrapolated
Polyethylene, high density, (blown)	1.1	73	0.034	0.041	—
"	1.1	100	0.064	0.048	—
"	1.1	212	—	0.375	0.48
"	2.2	100	0.065	0.050	—
"	2.2	212	—	0.410	—
"	3.0	100	0.055	0.043	—
"	3.0	212	—	0.35	—
(quenched)	1.1	100	0.111	0.102	—
"	1.1	212	—	0.630	—
Polypropylene (cast)	1.5	73	0.105	0.086	—
		100	0.140	0.14	—
		212	—	1.2	0.66
Polyethylene terephthalate (polyester)	1.0	73	0.31	0.36	—
		100	0.34	0.26	—
		212	—	0.75	0.50
Polyvinyl fluoride	2.0	100	0.53	0.39	—
		212	—	2.11	2.20
		73	0.348	—	—
Polychlorotrifluoroethylene (unplasticized)	3.6	100	0.0045	0.007	—
		212	—	0.05	—





**Figure 1.** Single-ply package shape, X-Crepe paper coated with 4 mils of polystyrene. Bowls show draw which is obtained from a blank the diameter of the bowls' tops. All four of examples shown have plastic on the inside.

## Formable paper-plastics

*Combination of stretchable, cross-creped kraft paper with plastic lamina produces a new material that can be heat formed into low-cost decorative and functional shapes. By V. R. Piper\**

**W**hile kraft paper holds an acknowledged position as the workhorse of the packaging industry due to its low cost and toughness, it has not been used as extensively for packages as is desirable from cost aspects because it was lacking in decorative possibilities and forming properties. Plastics are widely used when decoration and forming properties are required even though the pound cost of plastics is many times that of kraft paper.

These facts have led researchers and packaging engineers to search for a combination of plastic and paper that would combine the decorative, protective and design characteristics of plastic with the strength properties and low cost of kraft paper. The major obstacle to the realization of this objective was that kraft paper laminated to plastic would not form

into compound shapes. It did not have sufficient stretch in all directions to permit draw and stretch with the plastic into the fully formed shape—when the plastic formed, the paper broke.

For more than 25 years, stretchable, cross-creped kraft papers, called X-crepe, have been produced by Cincinnati Industries, Inc. These products were capable of stretching in all directions from 20 to 45%. Hundreds of varieties have been made in single ply and multiple plies from ordinary kraft paper, colored papers, bleached kraft and printed papers. Now, product development has resulted in all-directional stretchability of from 60 to 65%. Current experimental work is expected to result in considerably greater elongation in all directions, perhaps exceeding 100%.

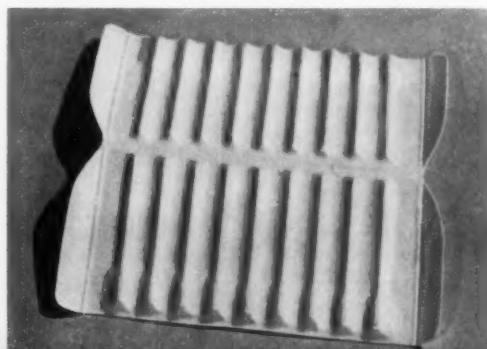
When combined with plastics, this new higher-

\*Technical Director, Cincinnati Industries, Inc., Cincinnati, O.

**Figure 2.** Single-unit suspension packaging is shown by this multi-ply insert. Package is self-standing.



**Figure 3.** Multi-unit suspension packaging can also be achieved. This is another self-supporting package.





# FULL-VIEW DISPLAY PACKAGING

By

WON THIS AWARD!



And Gives

New Lipstick

A

TREMENDOUS

SALES START



This package, designed and produced by Plastic Artisans, Inc. not only won the Gold Award in its division, but topped all entries to win Best Package of the Year Award for AR. Winarick Inc., N. Y. C. It's a proven sales-winner, too. It has helped give new DURA-GLOSS lipstick immediate sales success.

This P. A. package with product and printed material displayed between two transparent plastic domes sealed at edges, provides—

- Full view of product and sales copy, both sides
- Protection from handling and pilferage
- Slim design for efficient racking

Remember that P. A. can both design and produce exciting sales packaging for you.

**PLASTIC ARTISANS, INC.**  
Dock Street & Martin Place, Port Chester, New York

Custom-designed, mass-produced packages, package components, sampling devices, etc. in clear, opaque and colored plastics.



These two packages with plastic components designed and produced by P. A. each won awards in the same contest.



**Table I: Suggested laminating and forming conditions**

Material description	Laminating			Forming		
	Lbs./sq. in.	Temperature, deg. F.	Time, sec.	Lbs./sq. in.	Temperature, deg. F.	Time, sec.
X-Crepe #4562, extrusion coated with 0.004 polystyrene				15-125	250-275	6-10*
X-Crepe, #4562, four plies, laminated with 0.002 polystyrene, three layers†	150	350	15	100-350	250	
X-Crepe #4562, eight plies, laminated with 0.002 polystyrene, seven layers†	150	350	40	250-350	250	

\*The time shown includes heating and chilling in the forming press, but does not include the time for closing and opening the press. This material can be heated outside the forming press and formed using a water-cooled cavity. In that event, the time would be the period elapsed in feeding the material into the forming press, plus opening and closing the press—similar to a stamping operation.

†This material should be heated outside the forming press and formed using water-cooled dies. The time elapsed then is similar to a stamping operation; that is, time to feed, close and open the press. The ideal operation is to laminate and immediately form in an "in-line" production method.

stretch product can be formed and fully drawn with heat and pressure into decorative, protective, low-cost packages. These new products constitute a major breakthrough in providing packaging engineers and designers with an entirely new group of materials on which to base new packaging concepts.

The marriage of this exceptionally high-stretch paper with plastics yields an almost unlimited number of grades and variations having unique and interesting packaging properties.

For example, the decorative, protective and physical properties of various plastics can be utilized as

surfacing (one or both sides) on all grades and as laminating media for multiple-ply grades. The decorative possibilities, light weight, strength and low cost of kraft can be utilized both as the core or filler and as surfacing, increasing impact and edge tear strengths while reducing weight and cost.

Plastics used in experimental work and production to date include polystyrene, linear polyethylene, flexible and rigid vinyls, Videne polyester, ABS (acrylonitrile-butadiene-styrene) and Mylar polyester. Each imparts the properties that would be expected of it. Forming [Continued on page 306]

**Table II: Physical-property chart\***

Material tested	Tensile strength, lbs./1-in. width		Tear strength, gms.		Bursting strength, lbs./sq. in.	Caliper in.	Weight, 1,000 sq. ft.	Ratio paper to plastic, by weight by thickness	
	MD	CMD†	MD	CMD†	sq. in.				
X-Crepe #4562 coated with 0.004 polystyrene	25	20	600	800	65	0.025	80	2.5-1.0	5.2-1.0
X-Crepe #4562, four plies laminated with 0.002 polystyrene, three layers	75	65	Over 3,200		225	0.062	260	6.7-1.0	9.3-1.0
X-Crepe #4562, four plies laminated with 0.002 polystyrene, three layers, and surfaced on one side with 0.005 rigid vinyl	110	75	Over 3,200		200	0.067	290	3.4-1.0	5.1-1.0
X-Crepe #4562, eight plies, laminated with 0.002 polystyrene, seven layers	165	140	Over 3,200		Over 300	0.125	550	5.7-1.0	8.0-1.0

\*The above data are based on careful laboratory work and are believed to be reliable. However, since application of these products involves elements which are beyond the control of Cincinnati Industries, Inc., no guarantee, whether expressed or implied, is made.

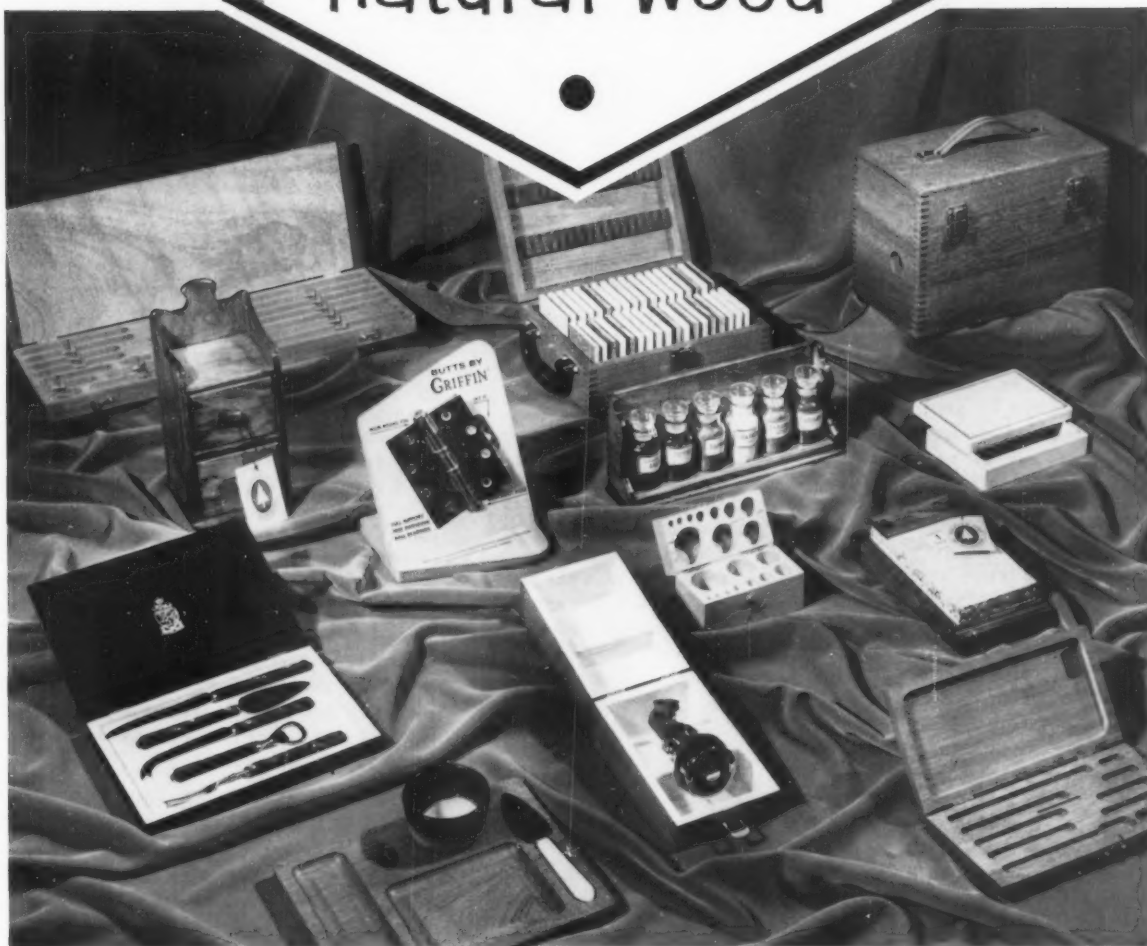
†MD: machine direction; CMD: cross-machine direction.

NOTE: X-Crepe grade #4562 weighs 57 lbs. 1,000 sq. ft.; maximum width available is 51 in.



NOTHING SELLS LIKE

natural wood



## NATURAL WOOD FOR variety

For infinite variety, natural wood is the natural choice. Only wood by Dunning could bring you the beauty and craftsmanship of Pioneer Pine, the prestige and impact of such distinctive displays, the permanence and protection of these finely finished chests and cases.

Whatever your sales appeal, it can be enhanced by the tasteful touch of wood packaging. Whatever the character of your product, Dunning can help you express it with the appropriate package or display. Select from an unlimited variety of woods, textures, grains, and finishes; add prestige and protection at lowest cost. No other packaging material is so versatile or appealing. And in the skillful use of fine woods, no one is so experienced as Dunning.

Like to see more dramatic applications of wooden boxes, cases and displays, gift and specialty items? Write today for complete information.



1950 POST ROAD DARIEN, CONNECTICUT

FACTORIES AT: BIDEFORD, MAINE • BELLOWS FALLS, VT. (2) • MIDDLETOWN, N.Y. • LYNCHBURG, VA.



## Questions & Answers

This consultation service on technical and engineering packaging subjects is at your command. Simply address your questions to Technical Dept., Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

### Protective cups and trays

**Q:** *We make waxed-paper trays and cups that are used for many delicatessen food products. There have been some reports that our cups and trays soften too much in contact with cottage cheese and some fruit products. We use a hard-sized-type paper and paperboard, with a wax blend as a coating. Should we use a special wet-strength-treated paper, or can we improve the wax to prevent this softening action?*

**A:** Food products that contain both acid and free water appear to penetrate waxes and exert a softening action on paper and paperboard. The severity of the softening will depend on the type and amount of acid, the free-water content and the time and temperature of exposure. Use of paperboard with higher levels of wet-strength treatment could be of some help, but improvement in the wax will give best results.

Resin-wax mixtures, especially those of polyethylene and wax, will give tough coatings that will resist penetration by the food acids. The addition of resins to wax can alter working characteristics on the line, so you must find the amount and type of resin that operates on your waxing line to give the desired coating. There are many such resin-wax mixtures on the market and the suppliers can be of great help in selecting the proper formulation for your machine operation and for the best performance against the various acidic food products.

### Test-cabinet humidity control

**Q:** *Our laboratory has modified an incubator-type cabinet to make package tests at 100 deg. F. and 90% R. H. This cabinet has no forced-air circulation and, while our measurements show good temperature uniformity in different parts of the cabinet, the humidity range is too wide. We find that humidity approaches*

*100% at the top of the cabinet and is less than 90% at the bottom. Saturated-salt solution used for humidity control is in a flat glass container on the cabinet bottom. Is there any simple method by which we can control and maintain uniform humidity in this type of cabinet?*

**A:** The variations in humidity are due to the more humid air rising to the top of the cabinet. As the humidity of air increases, it becomes lighter than that of dry or less-humid air. The simplest and best answer is to use a very small fan, so arranged to circulate the air from the top to the bottom and over the saturated-salt solution. This gentle but positive air circulation will also improve the temperature uniformity in the test cabinet.

Saturated-salt solution will only control the humidity of the air near its surface. Thus, a movement of the air over the solution is necessary for its effective use. Use of another tray of saturated-salt solution at the top of the cabinet will also help maintain the desired humidity level. Care must be taken to prevent the fan from blowing directly on any samples, as this can affect the moisture gain of the samples. A very small fan with a few baffles would be adequate to solve your problem.

### More protection for candy

**Q:** *We make a set-up box for a packer of fondant-type soft candies. We have been told that the candy dries out and becomes hard during long storage or in slow-moving markets. Can you suggest a more protective box for this product?*

**A:** It would appear that the candy hardens because of moisture losses through a paperboard box. The best answer would be to overwrap the box in moistureproof cellophane. This would be reasonable in cost and also provide sales appeal. It may be

that this type of candy will crystallize and harden in normal aging or by higher temperature in warm exposure and storage. A few laboratory tests would quickly prove the effectiveness of a cellophane overwrap. Tests could also be made to determine if the candy hardens in normal aging and if storage temperature is a critical factor.

### Bagged flour for export

**Q:** *We package special flours in 2-lb. quantities in white, printed paper bags. Occasionally we make small shipments overseas, but we have had numerous complaints of spoilage from export shipments. We would like to use a more protective package for export, but it should be able to be packed on our regular production line. Can you suggest an improved type of bag that we could use for export shipments?*

**A:** The spoilage of flour can occur by caking and molding from excessive moisture pick-up, or from insect infestation. Both types of spoilage could occur in the longer storage and shelf exposure of export packages. Insect infestation is difficult to prevent in bags and other flexible packages. However, if the problem is due to moisture pick-up of the package, this can be easily corrected. Flour does not pick up moisture until the humidity of the air reaches more than 70% R. H. Flour also can absorb considerable moisture before caking or molding. Since the product has only slight moisture sensitivity, only a moderate level of moistureproofness in the bag is necessary. A duplex bag with a liner of wax-laminated glassine, or a single-ply paper bag with an interior coating of about 1 mil of polyethylene should give ample moisture protection. These two bag constructions should operate well on your present bag-filling line. A full-turn, fold-over top closure firmly held in place is sufficient.



3M PRESENTS... creative packaging ideas by distinguished designers.



HARLEY EARL

**Harley Earl Associates design in "Scotchpak"**—the heat-sealable polyester film. From this crack creative staff, a new boil-in-the-bag portion-pack for wieners. Tough, heat-sealable **"Scotchpak"** retains flavor, provides convenience, permits addition of sauces, condiments. Merchandises and displays well, too. Design

also adapts to other foods — cigars, shotgun shells. Try **"Scotchpak"**—the film of the future for your new design ideas today. Write **Film Products Group**, 3M Co., 900 Bush Avenue, St. Paul 6, Minnesota—Dept. CAK-30.



"SCOTCHPAK" IS A REGISTERED TRADEMARK OF 3M CO., ST. PAUL 6, MINN. EXPORT: 90 PARK AVE., NEW YORK 10, CANADA: LONDON, ONTARIO

**MINNESOTA MINING AND MANUFACTURING COMPANY**

... WHERE RESEARCH IS THE KEY TO TOMORROW







▲ **HIGHER CUSTOMER APPEAL:** A Cinderella Knitting Mills, Inc. customer comments that polyethylene wraps give underwear "a richer appearance and an infinitely softer feel." And this means business. R. Wise, President, reports: "We experienced a 15 to 20 per cent increase in sales, attributed directly to the appeal of garments wrapped in polyethylene over garments wrapped in other films."

**BREAKAGE MINIMIZED:** Sutherland Paper Company's seasonal paper plate business requires long storage periods. Polyethylene ended long-time problems of wrappers drying out, embrittling, splitting and puncturing. Customer complaints and returns have sharply diminished. Overall costs are reduced. ▼



## See how polyethylene overwraps

**FRESH-FEELING LONGER:** Since Cushman Baking Company began using polyethylene overwraps, bread returns have decreased, sales increased. Housewives are reported buying more because polyethylene keeps bread soft longer, prevents drying out. Re-wraps have been less than with either of the wrapping materials previously used. ▼



**SOFT TEXTURE SELLS:** I. C. Herman & Co., Inc., credits the softer luxurious feel of polyethylene with helping increase the sales appeal of its men's handkerchiefs. Polyethylene solved inventory problems too. S. Trachtenberg, Packaging Director, says: "For the first time, we can give our retailers the important handkerchief display quality of tray-pack gift appeal plus package durability." ▼

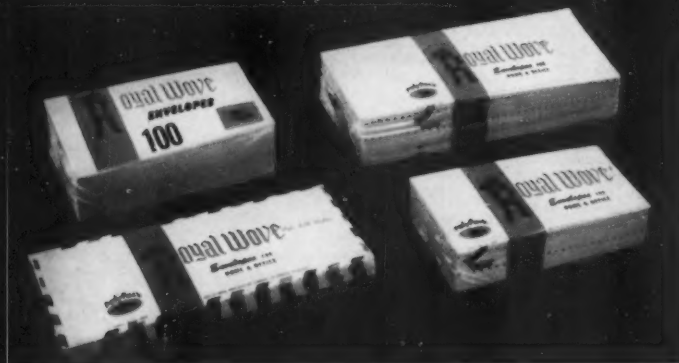


▲ **4-WAY BENEFITS:** Film softness is but one of four major reasons Pomona Paper Products, Inc., switched to overwrapping its "Marcal" napkins with polyethylene. Company President Paul R. May also looks forward to reduced packaging costs, top resistance to climatic effects, less wrapper breakage. A feature of this package is an easy-to-open tear strip.





**COSTS LESS:** Daniel M. Brown, General Manager, Royal Wove Envelope states: "Frankly, we went to polyethylene because it costs less than other transparent films. The results—no breakage no returns—prove our decision was wise." One of the firm's oldest and best distributors notes: "This is the first time we have not received at least some returns of packaged envelopes sent to retailers."



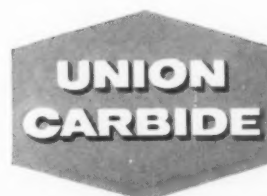
**SALES UP—COSTS DOWN:** Southern Maid Paper Company switched from wrapping its school papers with paper bands to automatic wrapping with polyethylene. Results: Production is up 20%, production costs down 33%, sales up 50%!

## can help make your profits grow!

**These consumer product manufacturers are:**

- extending product shelf life • reducing breakage returns
- increasing sales appeal • cutting costs • boosting sales

Chances are good—and these success stories are the evidence—that you too can get these important advantages by switching to automatic overwrapping with tough, sparkling, transparent film of BAKELITE Polyethylene. Why not investigate? See your packaging supplier. Or write for our two special booklets on polyethylene film for automatic overwrapping. Dept. CD-02M, Union Carbide Plastics Company, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, New York. In Canada: Union Carbide Canada Limited, Toronto 7.



**BOOST DEMAND:** When Top Flight Paper Products, Inc., began overwrapping stationery and envelopes with polyethylene, they had to increase production 700% to meet the sales demand. Also, packages no longer tear open or become shabby looking. E. Montgomery Robinson, Vice President, states: "Polyethylene has transformed our packaging operations."

**Get the up-to-date story on polyethylene flexible packaging at the Packaging Show. See us at Booth 353.**

BAKELITE and UNION CARBIDE are registered trade-marks of Union Carbide Corporation.



# Plants & People

J. Edward Dean has been appointed director of advertising for E. I. du Pont



Smith

de Nemours & Co., Wilmington, Del. His former position as director of sales for the company's Film Dept. has been assumed by Robert R. Smith, formerly director of packaging sales. Mr. Dean joined the company in 1927. He has worked both in production and sales and was named sales director of the Film Dept. in 1950.

Celanese Corp. of America, New York, has strengthened its position in the field of blow-molded plastic containers through two major expansions. The company reports that production of Fortiflex high-density polyethylene at its Houston, Tex., plant is being increased to an annual capacity of 50 million lbs. Celanese also has purchased Royal Mfg. Co., Prescott, Ariz., a blow molder of plastic containers. The parent company plans to increase production capacities at Royal plants in Prescott and Chicago, and also will open up a new plant in Trenton, N.J., some time this year.

L. J. Moore has been appointed to the newly created post of food-packaging sales mgr. of Packaging Corp. of America, Rittman, O. Mr. Moore, formerly with Sutherland Paper Co., will supervise the company's expanding service to the dairy, meat, margarine, frozen-food, bakery and other industries.

William W. Fitzhugh, Jr., has been elected pres. of New Haven Board & Carton Co., New Haven, Conn. He succeeds Joseph S. Miller, who becomes chairman of the board. Francis S. Wakeman has been named senior v.p.

Pen T. Whitehead has been promoted to the post of mgr.—beverage-packaging mdsng., in the Packaging Group of Fibreboard Paper Products Corp., San Francisco. Jean T. Oesterle has been appointed to the newly created position of asst. mgr.—produce-packaging mdsng., in the Packaging Group. Joseph C. Berney has been named mgr. of packaging equipment engineering. He will report to the v.p. and gen. mgr. of the Packaging Group. All three men will locate at San Francisco.

John T. Walton has been appointed mgr. of mktg. services in the Bag Div. of St. Regis Paper Co., New York. He was formerly mgr. of domestic licensee relations. Donald R. Russell has been named multiwall-product mgr. Alfred A. Roetzer has been appointed gen.

mgr. of packaging services for the Bag Div. He will coordinate engineering and machine div. operations to develop new packaging equipment. He was formerly sales mgr. for packaging equipment. John H. Dively has assumed the duties of asst. gen. manager.

J. Howard Dunn has been named mgr. of Aluminum Co. of America's process development laboratories at New Kensington, Pa. Formerly in charge of Alcoa's Cleveland sales development div., Mr. Dunn has been with the company since 1934.

Standard Packaging Corp., New York, and Brown & Bigelow, St. Paul, have entered into a merger agreement. By its terms, Standard Packaging will operate the Minnesota firm. Brown & Bigelow has been in business for more than 50 years. Among other products, it manufactures set-up boxes and converts flexible-packaging materials.

Chet Haley has been named sales mgr. of Bradley Associates, Inc., Chicago, maker of plastic boxes and custom-molded containers.

John L. Bandelin has been appointed mgr. of new-product development and special asst. to the gen. sales mgr. of Forbes Lithograph Mfg. Co., Boston. He will continue to direct carton sales.

Eureka Specialty Printing Co., Scranton, Pa., has purchased Pee Cee Tape & Label Co., Los Angeles. Pee Cee, a converter of pressure-sensitive labels and tapes, will operate under its own name as a div. of Eureka.

Continental Can Co., New York, has set up a Plastic Bottle & Tube Div., with headquarters in Chicago. Charles F. Lenhard, formerly plant mgr. of the company's Chicago plastic-bottle plant, has been named mgr. of the new div. He will supervise sales, production and research and development.



Lenhard

In line with the increased demand for plastic bottles, Continental is planning to establish additional manufacturing facilities on both the East and West Coasts and in the Midwest.

The company's Paper Container Div. is to be known henceforth as the Bondware Div. The div. will continue to make a full line of paper and plastic food containers as well as Bondware consumer cups and plates.

Harold J. Humphrey, a pioneer in the frozen-food industry, has retired after more than 30 years of service with the

Birds Eye Div. of General Foods Corp. Mr. Humphrey started his career with the U. S. Dept. of Agriculture's Bureau of Chemistry—forerunner of the present Food & Drug Administration. Although he left government service to do research and development work for GF, Mr. Humphrey continued to serve the government in a variety of advisory posts. He also acted as a consultant to industry groups promoting research in the frozen-food field. He has been active in the National Canners Assn. and is just finishing a term as pres. of the National Assn. of Frozen Food Packers. He is presently serving as consultant to Irradiated Products, Inc., a company formed by GF, Continental Can, Armour & Co. and Food Machinery & Chemical Corp.



Sheehan

Nicholas R. Sheehan has been promoted to mgr. of the industrial sales div. of The Dobeckmun Co., Cleveland, a div. of The Dow Chemical Co. A product sales mgr. for the past year, Mr. Sheehan now has complete responsibility for sales of the company's industrial products, including barrier materials, electrical insulation tapes, laminated card stock and tape and Metallflake decorative metallic chips. He has been with Dobeckmun for more than 25 years.

Thomas A. Poe has been named industrial district sales mgr. in New York by Dobeckmun.

General Research & Supply Co., Grand Rapids, Mich., has formed a new company, to be known as General Formulations, Inc. Located in Sparta, Mich., the new firm will produce inks, adhesives and functional coatings for screen-process application. Pres. of the company is James A. Black.

J. T. Doyle becomes gen. sales mgr. of the Polyken Sales Div. of The Kendall Co., Chicago. W. J. Hodges is sales mgr. Polyken is a supplier of industrial tapes and protective coatings.

St. Regis Paper Co., New York, is negotiating to purchase Creamery Package Mfg. Co., Chicago, a manufacturer of equipment for processing dairy and food products. Founded in 1887, Creamery Package operates four plants in Wisconsin and Illinois.

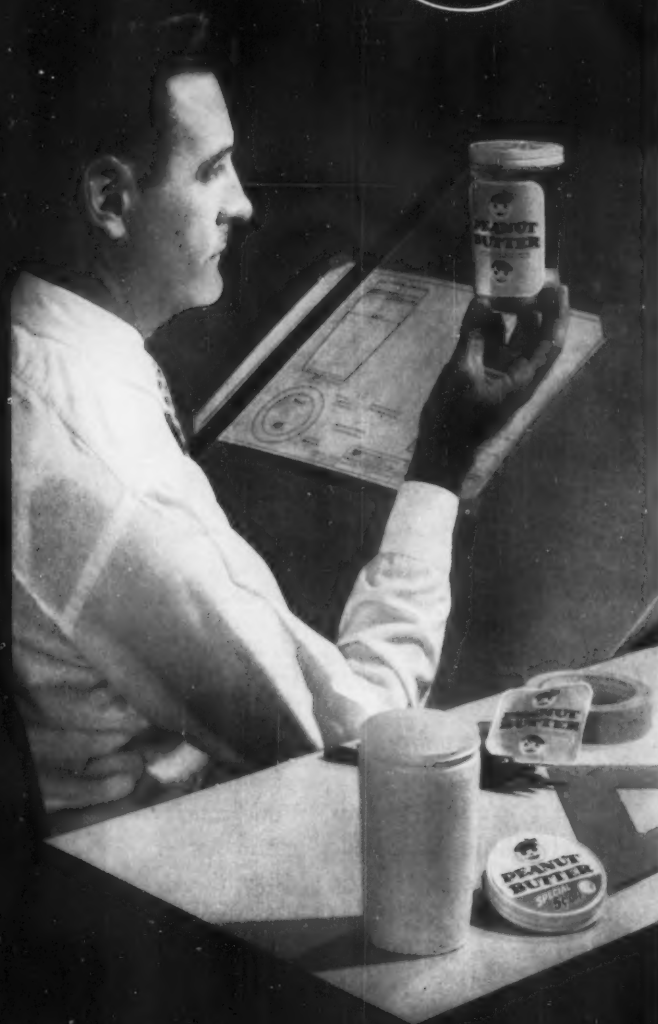
Simultaneous expansion and consolidation of manufacturing operations on the East and West Coasts has been begun by Milprint, Inc., Milwaukee. Additional facilities at the company's Downingtown, Pa., plant will absorb the operations of Milprint's other East



One more reason\* why you should

call *Ball* first

GLASS CONTAINERS  
FOR METAL CLOSURES  
PACKAGING COUNSEL



## Complete Packaging Counsel That Helps You Clinch Sales at Her *Moment of Decision*

Attractive container — displaying and enhancing its contents through clear, sparkling glass... colorful label — swiftly spelling out trade name and information... protective closure — sealing in freshness and goodness, its top another bright spot for trade mark and message.

Each of these plays an important part in complete packaging. Compelling design

and careful planning by Ball can integrate each into one effective selling tool.

Together, at the customer's all-important moment of decision, they can help move your product from the store shelves faster. The decision to make use of Ball's packaging counsel, glass containers and closures may be momentous for the sales future of your product.

**BALL BROTHERS COMPANY, INC.**, Muncie, Indiana; Chicago, Illinois; Okmulgee, Oklahoma; El Monte, California. Represented in major cities through the United States.



NEW AND BRILLIANT FROM IPI

**FAST SETTING  
QUICK DRYING**

# Speed King

## CARTON INKS

### FOR LETTERPRESS AND OFFSET

The quick set, fast dry and high gloss of IPI's revolutionary Speed King inks for general commercial use are now available to package printers!

Speed King Carton inks set so fast—even on patent coated boards—that offset rarely is a problem. This means higher press loads without racking, less handling, and considerably less spray than needed for conventional gloss carton inks.

Speed King's gloss on clay coated and on cast coated stocks such as LUSTERKOTE, KROMEKOTE, ULTRA-GLOSS, etc., rivals that of the finest gloss carton ink. And be-

cause it's a more uniform gloss, even lower cost stocks print better!

Speed King's split-second set and amazing dry (as little as 2 hours) mean faster processing of the printed board—with obvious advantages to the carton printer.

Speed King is stable on the press; half-tones don't muddy up, small type stays open.

These wonderful new inks—both letterpress and offset—are now available from your nearest IPI branch, in a wide range of popular carton colors.

Try them on a really tough job—and see the definite difference!

IPI, IC and Speed King are trademarks of Interchemical Corporation



INTERCHEMICAL • PRINTING INK  
CORPORATION DIVISION

EXECUTIVE OFFICES: 67 WEST 44th STREET, NEW YORK 36, N. Y.





## Plants & People [Cont'd]

Coast plant. Ground has been broken for plant expansion at the South San Francisco location where all West Coast manufacturing will be consolidated following close-down of the Los Angeles operation. Milprint will continue to maintain a sales office in Los Angeles.



Hill

Vernon Hill has been appointed director of plastics development for National Cleveland Corp., Cleveland. He will serve as staff advisor and coordinator on all matters related to the company's increasing diversification, including product development for its Auto-Vac Co. and Auto-Blow Corp. properties. Prior to joining National Cleveland, Mr. Hill was associated with Continental Can Co. and Celanese Corp. He has spent 18 years in the plastics field and is considered an expert in blow-molding.

Two long-time executives have retired from active service with Marathon, Div. American Can Co., Menasha, Wis. They are: John Stevens, who served as pres. of the Marathon for five years prior to its merger with Canco, and Leo M. Croy, with the organization since 1923. He became gen. sales mgr. in 1930 and was appointed exec. v.p. for mktg. in 1952.

Fiori Paperboard, Inc., is the name of a new company now in operation at Tipp City, O. It will specialize in the manufacture of cap stock and will produce other types of paperboard. Pres. of the company is Joseph J. Fiori. V.p. is James C. Baxter, pres. of J. C. Baxter Co., Minerva, O., a manufacturer of spiral-wound paper tubes and cores.

E. Victor Martocci has been elected pres. of Industrial Lithographic Co., New York. Joseph W. Clark has been appointed v.p. Arthur C. Eisberg is director of sales for the point-of-purchase advtg. div. and Anthony P. Jacobi has been named sales director of the packaging division.



Laycock

Crown Cork & Seal Co., Philadelphia, has named Zane B. Laycock div. mgr. of sales for the Machinery Div. After experience in the industrial-machine field with Koppers Co. and Morse Twist & Drill Co., Mr. Laycock joined Crown in April 1959 as mgr. of industrial machine sales. In his new post, he will be responsible for all functions of the machinery Div.'s sales-and-service dept.

A. W. Kath, director of engineering for the R. P. Scherer Corp., Detroit, has completed 50 years of service to the pharmaceutical industry. Mr. Kath is well known for his developments in the field of packaging machinery. He began

his career in 1909 with the Arthur Colton Co. While there, he developed the first semi-automatic machine for making hard-shell gelatin capsules, a later automatic machine for the same purpose and what is reported to be the first capsule-filling machine. Mr. Kath moved to Eli Lilly & Co. in 1946, to Strong, Cobb & Co. in 1952 and to Scherer in 1956.

He holds some 50 patents in machine and package design. Among his developments is the giant collapsible-tube-filling machine used for packaging tooth paste and shaving cream.

Cellu-Craft Products Corp., New Hyde Park, N.Y., has added an engraving dept. to its art and mechanical production dept. The new facility makes available metal engravings and rubber plates for use in flexographic printing. The company reports that it is now equipped to handle all creative and production steps involved in package design.

Plans for a major expansion in polyethylene-production capacity have been revealed by The Dow Chemical Co., Midland, Mich. The company has begun construction on new facilities at its plant in Freeport, Tex., which are expected to increase production there by some 67%. Two other Dow polyethylene facilities—at Plaquemine, La., and Bay City, Mich.—open this year.



Garritson

Edward R. Garritson has been appointed gen. sales mgr. of the Paper Package Co., Indianapolis. Robert M. Mauzy, secy. and director of industrial relations, has been elected v.p. Mr. Garritson, who succeeds M. L. McManus, retiring, joined the Paper Package sales dept. in 1937. Mr. Mauzy has been with the company since 1930.

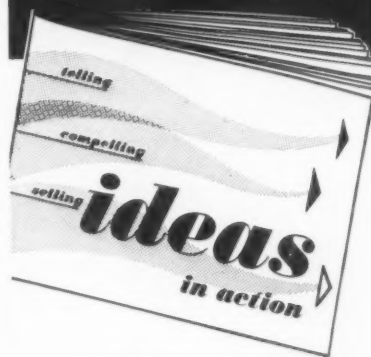
The Fuller Brush Co., Hartford, Conn., has moved into a new \$6.5-million plant in East Hartford. The new facility is designed to increase and broaden the company's production. Among the new installations are improved automatic packaging machinery and plastics-handling equipment.

The Mead Corp., Dayton, O., reports that v.p. R. H. Savage will now work with the chairman of the board on the development of corporate projects. He had directed Mead's research and development dept. since 1937.

George H. Sheets becomes managing director of research and development. He is succeeded as Chillicothe div. mgr. by Hoyt H. Wheeland. In other Mead appointments, George F. Martin becomes products development mgr. and William H. Brickner becomes products planning mgr.

Stainless & Steel Products Co. of St. Paul, Minn., has formed a new div., Thiele Packaging Machinery Co. The company will make and sell automatic and semi-automatic packaging machines developed by Thiele Engineering Co., Hopkins, Minn. Automatic case pack-

## 48-PAGE "IDEAS IN ACTION" BOOK ...free



... most complete label, seal and tag idea-encyclopedia ever compiled!

Full-color book loaded with hundreds of ideas in action... from the large project to the small... for the largest corporation to the smallest.

Post yourself on the very latest developments in telling and selling with labels and tags—let Allen Hollander Co. show you the HOW-WHERE-WHEN-WHY of label usage. Get your copy when you

**Come visit us at  
Booth 614-616  
PACKAGING SHOW**

**ATLANTIC CITY  
APRIL 4-8**

**—and see our NEW  
EXCLUSIVE TWO-WAY  
LABEL DISPENSER**



it's the only pressure-sensitive label dispenser capable of accommodating either roll or fan fold labels in multiple widths at minimum cost. DON'T MISS IT!

If you can't attend the show—write for your free copy of "IDEAS IN ACTION" today!

**allen hollander co., inc.**  
manufacturers of labels, seals and tags  
385 Gerard Avenue, New York 51, N.Y.  
MOtt Haven 5-1818  
Sales Offices: Boston, Chicago, Cleveland,  
Detroit, Philadelphia  
Plants: New York, Cleveland.



# STIXIE® plans success



Stixie and Ralph Bates spend their nights devising ways to turn out higher quality pressure sensitive products faster than anyone else. By day, they put these ideas to work.

Stixie is the dedicated little elf who symbolizes Coated Products' dependability, quality and service. Ralph Bates is Coated Products' Production Superintendent — a man who has 30 solid years of shop management behind him.

Stixie and Ralph are most sensitive about Coated Products' pressure sensitive products. They feel a deep responsibility to fill customer orders promptly and efficiently. They see to it that the right men work on the right job, that the proper ingredients are properly applied in each mixing, coating and converting operation (Coated Products does all its own mixing of adhesives and coating of release papers), and that each customer order is packaged perfectly and shipped on schedule.

When these two devoted souls are not planning, they're working . . . and vice versa. Why not drop in and watch Stixie and Ralph practice their productive legerdemain? It's a sight to warm the heart of any customer in a hurry for his order.



Stixie and Ralph Bates plan ahead.

**COATED PRODUCTS, INC.**

275 LINCOLN BOULEVARD • MIDDLESEX, NEW JERSEY • ELLIOT 6-3700



## Plants & People [Cont'd]

ers, carton-set-up machines, a milk-carton-inspection and case-loading machine and coupon-placing equipment will be made by the new firm. **In-Pak Systems, Inc.**, has been appointed representative in the New York area.

**Howard S. Malby** has been named head of field technical service and **William P. Mastrolia** has been appointed director of mkt. research for **Celanese Plastics Co.**, a sub. of **Celanese Corp. of America**, New York. For the past five years, Mr. Malby has been in charge of the firm's tech. service and sales development on the West Coast. Mr. Mastrolia did research and development work for **Colgate-Palmolive** before joining **Celanese Plastics** in 1955.

**C. U. Harvey** has become gen. mgr. of the Central district of **Continental Can Co.'s** Fibre Drum & Corrugated Box



Harvey Groner Pitts

Div. He headquarters in Plymouth, Mich. He succeeds **Robert Groner, Jr.**, who is now gen. mgr. of the Div.'s Southern district, with new headquarters in Richmond, Va. **L. B. Pitts** has taken over Mr. Harvey's former position as gen. mgr. of the Div.'s Eastern district. He formerly held the same position in the Southern area.

**Dr. Harold K. Hughes** has been appointed director of the Dept. of Physics at **Concan's Central Research & Engineering Div.** in Chicago. He will head research work on application of the principles of physics to high-speed automatic equipment for production and quality control of metal, paper, plastic, glass and composite containers and closures.

**Sun Chemical Corp.**, New York, has purchased **Facile Corp.**, Paterson, N. J. Facile makes a basic line of coated and laminated films and fabrics for packaging, as well as industrial and decorative tapes. **Eugene Jacobson**, former pres., will manage the Facile div. as part of the parent company's Chemicals Group.

**R. H. Hersey** and **M. P. Claussen** have retired from the **Bemis Bro. Bag Co.**, St. Louis, Mo. Mr. Hersey, v.p. and sales director for national accounts in the Minneapolis office, came to Bemis in 1914. Working from Bemis' Boston offices, Mr. Claussen was in charge of procurement and materials. He joined the company in 1916 and became a v.p. and director in 1949.

**Consolidated Paper Corp., Ltd.**, Montreal, is negotiating to purchase the [Continued on page 228]

"there is only one reason for designing a package... to sell more of a product"

# PACKAGE




# DESIGN

*The Walter Frank Organization*

ENGINEERING • DEVELOPMENT • SALES

4100 WARREN AVE. • HILLSIDE, ILLINOIS



## FLEX-O-FILM<sup>®</sup>

TOP QUALITY PLASTIC FILM

**Specially Developed for:**

**SKIN PACKAGING**

**BLISTER PACK**

**VACUUM FORMING**

FLEX-O-FILM "B"—Crystal Clear BUTYRATE

FLEX-O-FILM "V"—Crystal Clear FLEXIBLE Vinyl

FLEX-O-FILM "VR"—Crystal Clear RIGID Vinyl

Also manufacturers of Polyethylene for Industrial Uses

We specialize in helping solve your problems and giving fast service.

Write or Phone for Information and Samples

## FLEX-O-GLASS INC.

Pioneers in Plastics—Established 1924.

1100 N. Cicero Ave. • Chicago 51, Ill. • Phone CO 1-5200





Sheffield Tubes



# FAVORED IN THE PACKAGING OF HOUSEHOLD PRODUCTS

*In cosmetic, pharmaceutical and industrial product packaging also!*

## SHEFFIELD TUBES



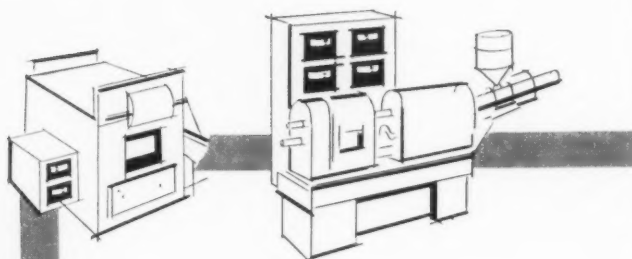
A CHILD'S SIMPLE FAITH that anything broken can always be fixed is tribute to the many wonder-working "fix-it" products now in Sheffield collapsible metal tubes. Since 1850, Sheffield has set the standard of excellence in practical packaging...helping to make hundreds of household products so usable "even a child can do it!"

THE SHEFFIELD TUBE CORPORATION

Home Offices: New London, Connecticut • Sales Offices: New York • Chicago • Los Angeles



Why it pays to see that  
**WEST Instruments** are in  
**Original Equipment**  
 using Temperature Control



**Makers say**

"Our equipment sells best on performance, including ease of operation and maintenance. We can't risk dissatisfaction that stems from components, such as instruments. We're safer with Gardsman, by West, and their world-wide service."

**Users say**

"Instrumentation can be the key to overall efficiency of major equipment. West temperature controllers work better than most, definitely save on several counts . . . including initial cost. It pays to specify."



**Whatever** type of control—off-on, proportioning, high-limit, stepless, program—get the best: get West. *Tubeless*. Compact. Reliable. Ask your West representative or write for Bulletin COM.



4359E W. MONTROSE, CHICAGO 41, ILL.



See us at  
 29th National Packaging Exposition  
 Atlantic City, N. J.  
 Convention Hall  
 April 4-7, 1960  
 Booth 1220

the trend is to WEST



**Plants & People** [Cont'd]

[Continued from page 225]

multiwall bag and packaging system manufacturing facilities of St. Regis Paper Co. (Canada), Ltd. Two additional directors representing St. Regis interests are to be appointed to the board of Consolidated Paper which plans to incorporate a new company, to be called St. Regis-Consolidated Packaging, Ltd. St. Regis will maintain an interest in the operation of the new firm and will continue to provide technical aid.

E. A. Jacobs has retired as v.p. and gen. mgr. of Triangle Bag Co., Covington, Ky. J. H. Allen has become acting gen. mgr. of the firm, a sub. of The Crossett Co. Triangle was organized by Mr. Jacobs and a partner in 1919. It was purchased by Crossett last year.

Crescent Ink & Color Co. of Pa., Philadelphia, has created a new position—director of sales development. Edward M. Wade, formerly with Bensing Bros. & Deeney, has been appointed to it.



Davis

Leo M. Davis has been appointed v.p. and gen. mgr. of Western operations of Pollock Paper Co., Dallas, a div. of St. Regis Paper Co. For the past 12 years, Mr. Davis served as asst. to the exec. v.p. and as gen. mgr. of Pollock's paper-mill operation at Columbus, O. From headquarters in San Francisco, he will supervise all Pollock's manufacturing and sales operations on the West Coast.

Dr. Henry Blau and Wilfred M. Wyburn recently were elected v.p.s. of Federal Paper Board Co., Bogota, N.J. Dr. Blau will be responsible for glassware manufacturing at Columbus, O. He also will continue as head of production and development under Edmund A. Donnan, v.p. in charge of Federal's glassware and container operations at Columbus. Mr. Wyburn is now v.p. in charge of engineering.

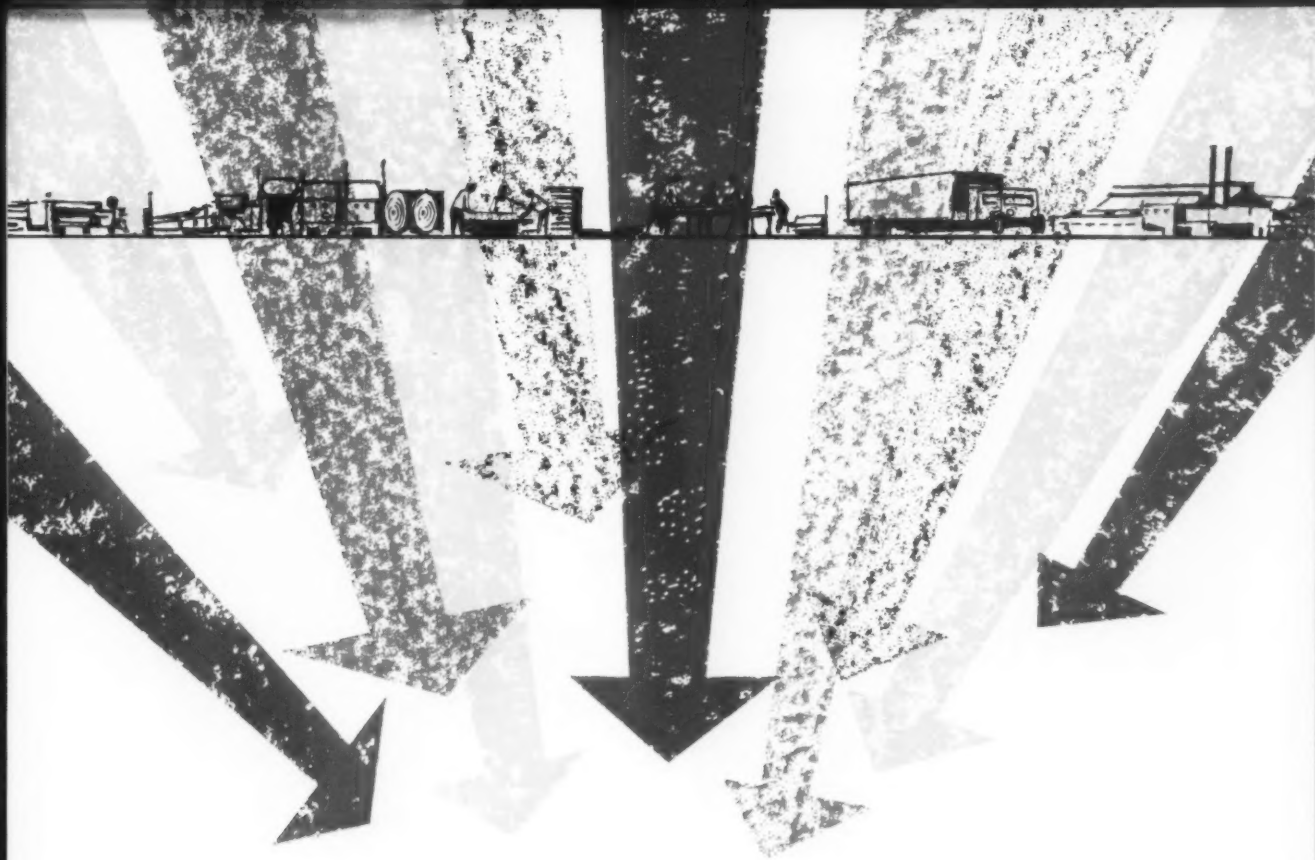
Robert G. Clayton has been appointed v.p. and gen. sales mgr. of Einson-Freeman Co., Long Island City, N.Y. Prior to joining Einson-Freeman, Mr. Clayton was v.p. in charge of mdsng. for the Pro-Phy-Lac-Tie Brush Co. Einson-Freeman is a lithographer and display manufacturer.

Ralph J. Brown, Jr., has been named director of Mel Richman Design Associates, package design, Philadelphia.

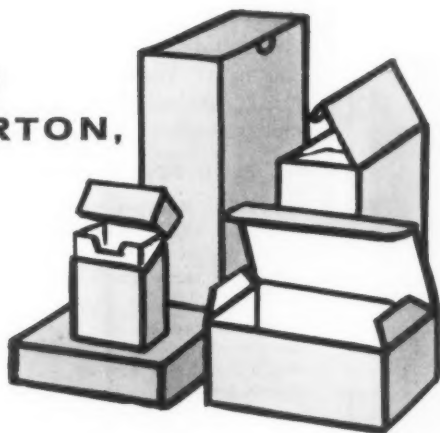
Robert W. Hofmann has been named to the newly created post of tech. service rep. at Vulcan Containers, Inc., pail-and-drum manufacturer of Bellwood, Ill.

Owens-Illinois Glass Co., Toledo, has purchased a minority interest in Actien-Gesellschaft der Gerresheimer Glas-huttenwerke of Dusseldorf, Germany, and has concluded an agreement for





**AT BERLES  
CARTON,**



**EVERYTHING  
is focused  
on the  
customer's needs**

Whether in engineering the package, in styling, choice of board, determination of process (Berles has the most modern offset, gravure and letterpress equipment) or in expediting shipment and delivery, Berles always gears its efforts to satisfy all the needs of the particular job.

*Remember — Berles contains everything in cartons.*

- OFFSET
- GRAVURE
- LETTERPRESS
- COATING
- LAMINATING
- BOARD MILL
- SERVICE
- QUALITY

## **BERLES CARTON COMPANY, INC.**

FOLDING BOXES • DISPLAY, TRANSPARENT WINDOW, MOISTURE-PROOF, GREASEPROOF and PARAFFINED CARTONS • FOOD CARTON SPECIALTIES  
Sales and Development Headquarters: 375 Park Avenue, New York 22 • Executive Offices, Plants and Paperboard Mill: Paterson, N. J.



*New Ideas*  
for today's dynamic packaging  
*in LABELS*

*See them at our*

*Booth 664-666*

HEATSEAL

BAGTOPS

PRESSURE SENSITIVE

ROLLS

GUMMED

FOIL, ETC.

AMA  
NATIONAL  
PACKAGING  
EXPOSITION

ATLANTIC CITY  
APRIL 4-7, 1969

PHONE OR WRITE  
FOR ONE OF OUR  
LABEL SPECIALISTS  
TO SERVE YOU.  
NO OBLIGATION;  
OF COURSE.

*Since 1928*

DESIGNERS & MANUFACTURERS OF QUALITY LABELS

**TOMPKINS' LABEL SERVICE**

FRANKFORD AND ALLEGHENY AVES.

PHILADELPHIA

ATLANTA • BOSTON • HARTFORD • NEW YORK

## *Feedomatic* **AIR CLEANER**

OVER  
200  
NOW  
IN  
USE



### **Unscrambles and Cleans in One Operation**

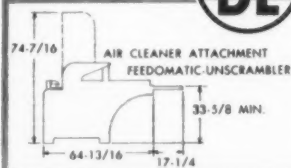
First of its kind! Thoroughly air cleans each container before it is single-filed onto the conveyor. Removes all dust, lint and other foreign matter. Variable speeds from 30 to 150 per minute on round, oval and rectangular containers.

#### **SEND FOR CATALOG**

*of Modern Equipment and Accessories for Filling and Labeling.*



Feedomatic Unscrambler for single-filing only is available as a separate unit.



#### **OUTSTANDING ADVANTAGES**

Silent Operation • Perfect synchronization, through integral drive, with B-E FILABELMATIC and B-E ROTARY FILLER • Gentle action • No marring or scratching • Rapidly adjustable dividers • Changeover time takes only minutes • Take-off conveyor to right or left • Can be used 4, 6 or 8 wide (Belt 36" wide) • Large inventory of containers on machine • Available with 3/4" or 4 1/2" conveyor chains • Variable speeds from 30 to 150 per minute • Handles smallest containers... gallons, too.

**BINER-ELLISON  
MACHINERY COMPANY**

1101 North Main Street • Los Angeles 12, California  
Phone CApitol 5-8162



## Plants & People [Cont'd]

exchange of technical assistance and patent licenses. The German company and its seven subs. produce glass containers and related products.

Chanal Plastics Corp., Rego Park, N.Y., has formed a blow-molding div. to be located at the company's recently expanded Rego Park facility. Frank E. Seborowsky, formerly with Celanese Corp. of America, has been appointed gen. mgr. Chanal's new div. offers custom service to the packaging, display, and industrial-parts industries.

Richard W. Haward is new sales mgr. of the Eastern Container Sales Dept. of Dewey & Almy Chemical Div., W. R. Grace & Co., Cambridge, Mass. He was formerly Midwest sales mgr. for can, closure, and industrial compounds. Robert J. Douglass has been named asst. sales mgr. of the Eastern Container Sales Dept., reporting to Mr. Haward. Formerly in charge of Midwest sales of construction chemicals, Richard G. Allen has been appointed Midwest product sales mgr. for can-sealing and industrial compounds.



Haward

A new plant for the production of polyvinyl-chloride resins is being constructed at Illiopolis, Ill., by The Borden Chemical Co. Total annual capacity is expected to reach 40 million pounds.

Completion of new production and laboratory facilities is reported by Polymer Industries, Springdale, Conn. The manufacturer of adhesives and chemical specialties also has begun construction on a new polymerization plant and a new solvent-mixing plant.

Completion of an \$800,000 expansion and improvement program at Stone Container Corp.'s boxboard mills at Mobile, Ala., and Franklin, O., has been announced. Various items of new equipment have been installed at both mills.

Two corporations, formerly operating as wholly owned subs. of Continental Can Co., have been merged. Gair Woodlands Corp. and Southern Paperboard Corp. have combined operations and also have been merged into the parent company.

The Mead Corp., Dayton, O., has begun operation of its first manufacturing plant on the West Coast. Located in Los Angeles, the new plant produces cartons for the soft-drink, beer, grocery and food industries, in addition to a line of other folding cartons. Homer G. Murphy is gen. mgr. of the new facility.

Repro Design & Equipment Co. has transferred its offices and plant to larger quarters at 1310 E. Elizabeth Ave., Linden, N.J.

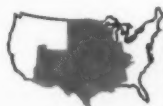
Additional facilities which will substantially increase the firm's productive ca-

Another in a series of Hoerner  
Corrugated Shipping  
Container Experts



### THIS IS THE HOERNER SPECIALIST FOR PACKAGING FOLDABLE THINGS

If it's got a hinge this expert can design the corrugated container in a snap. Things that fold can often unfold enroute. Resulting shipping damage lays profits wide open. If you manufacture a folding item—or any other for that matter—and packaging or shipping costs have you in a bind, unbend a little and contact the Hoerner plant or office nearest you.



## HOERNER BOXES, INC.

Corrugated Specialists for Mid-America

GENERAL OFFICES: 600 Morgan Street, Keokuk, Iowa • PLANTS: Fort Smith and Little Rock, Arkansas; Des Moines, Keokuk and Ottumwa, Iowa; Sand Springs, Oklahoma; Minneapolis, Minnesota; Tupelo, Mississippi; Springfield, Missouri; Fort Worth, Texas; Sioux Falls, South Dakota • ASSOCIATE: Cajas y Empaques Impermeables, S. A. Mexico City D. F., Mexico

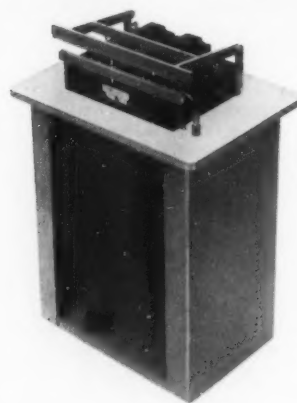


# VERTROD

## THERMAL IMPULSE HEAT SEALERS

Manufacturers of the most advanced and efficient Thermal Impulse Heat Sealers. A complete line assures every user of the exact machine required for his individual operation. These machines are designed for uniform, positive sealing and trim sealing without using continuous heat. They require no warm-up period and will seal all thermoplastic materials and laminations; Polyethylene, Pliofilm, Saran, Vinyls, Nylon, Mylar, etc. Vertrod heat sealers are dependable, need a minimum of maintenance and have maximum built-in safety features. Seals can be made through wrinkles, gussets, liquids and powders. Hand, foot pedal and electromagnetic or pneumatic power-operated models up to 80" long. Special sealers to fit specifications.

Send for **FREE DESCRIPTIVE LITERATURE.**

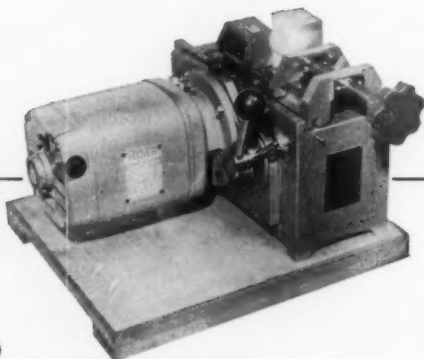


Vertrod Thermal Impulse Sealers are manufactured under one or more of the following U.S. patents:  
2,460,480; 2,479,025; 2,509,429; 2,574,094; 2,574,095; 2,630,596;  
2,633,485; 2,640,794; 2,640,796; 2,630,183; 2,675,054; 2,687,394.  
Canadian Patents 468,140 and 476,337. Other Patents Pending.

**Vertrod** Corp.

See us at **NATIONAL PACKAGING SHOW**  
April 4-7—Convention Hall, Atlantic City, N.J.  
Booth No. 658

THERMAL IMPULSE HEAT SEALING MACHINERY  
2037 Utica Avenue, Brooklyn 34, N. Y.



®  
**CODEDGE**

**LABEL DATING AND CODING MACHINE**

**CODES LABELS, ALL SHAPES, ALL SIZES  
CLEAN, FAST AND ECONOMICAL  
SAVES TIME, LABOR AND MONEY  
NEVER A SERVICE PROBLEM**

WILL CODE OVER 2000 LABELS PER MINUTE  
VERSATILE • QUICK CHANGE-OVER

For Details Write to

**GRIFFIN-RUTGERS, INC.**  
DEPT. MP 3 41 EAST 42 ST. NEW YORK 17, N.Y.

See us at the **AMA National Packaging Show**—Booth 1516 Atlanta City—April 4-7

**CAN  
YOU  
KEEP  
PAGE?**



Heading into the high level economy of the 1960's, will your equipment be able to deliver your share? Remember, you'll have a bigger volume to deliver.

Equipment modernization and special machinery to solve production problems is our business. It will cost you nothing to call us with your problem. Your gain—or loss in 1960 depends on your machinery.



**WEST ENGINEERING CO., INC.**

DEPT. M VAWTER AVE. ON C&O RLWY  
RICHMOND, VIRGINIA • MI 4-3001



capacity are nearing completion at the Daubert Chemical Co. plant in Chicago. Construction will house machines for chemical processing of paper products, rubber-based adhesives and sealers.

The Philadelphia office of The Dobeckmun Co., Cleveland, a div. of The Dow Chemical Co., has moved to larger quarters. New mailing address is P.O. Box 4568, Philadelphia 31.

A multi-furnace glass-container plant is to be erected on a 70-acre site in Brockport, N.Y., by Owens-Illinois Glass Co., Toledo. According to the company, the new facility will be highly automated and geared to volume requirements.

With the construction of a new annex to the Chicago plant, the last step in a four-plant expansion program by Kleen-Stik Products, Inc., Chicago, is under way. Facilities at the company's three other plants were increased last year.

Work is in progress on a new and enlarged extrusion laboratory at Mountainside, N.J., for the Waldron-Hartig Div. of Midland-Ross Corp., New Brunswick, N.J. The company makes extruders, accessories and web-processing machinery.

Following recent expansion of its Northeastern district, sales headquarters of E. I. du Pont de Nemours & Co., Wilmington, Del., have been transferred to larger offices at 45 Fourth Ave., Waltham, Mass.

Kolar Laboratories, Inc., Chicago, is celebrating its 50th anniversary this year. The concern does private-brand packaging of cosmetics.

R. C. Can Co., St. Louis, has opened a new div. in the Chicago area. The new plant, at 2000 Pratt Blvd., Elk Grove, will manufacture convolute and spiral cans, tubes, cores, spools, ribbon blocks and specialty items.

Precision Packaging Co., Ltd., Don Mills, Ont., has been appointed distributor of the Sentinel line of blister-packaging machinery made by Packaging Industries, Ltd., Montclair, N.J.

The Texas district sales office of Union Carbide Plastics Co. has moved to 6300 N. Central Expressway, Dallas.

Rieke Metal Products Corp., Auburn, Ind., plans to erect a new office and warehouse building in Linden, N.J. The company makes metal and plastic closures and cap seals for drums and containers.

Vanguard Plastics, Inc., has moved to 29 Bannard St., Freehold, N.J. The firm makes stock, detergent-style, blow-molded bottles.

Willis Equipment Co., Camden, N.J., is representing Carbert Mfg. Co., div. of Pneumatic Scale Co., and Elliott Mfg. Co. of Fresno, Calif. Carbert makes automatic plastic-bag sealers and

MORE THAN EVER —  
EVERY BOXMAKER'S BEST BET

# MANHATTAN ADHESIVES

...because Manhattan research laboratories are always at work developing packaging adhesives that meet the ever changing demands of American industry.

There's a Manhattan Adhesive for every packaging requirement.

We Invite Your Inquiries.



MANHATTAN ADHESIVES CORPORATION  
*Lion Brand Adhesives*

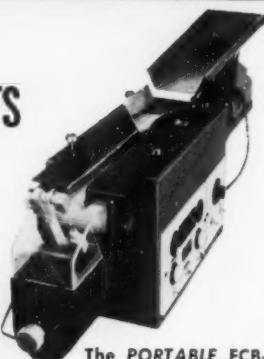
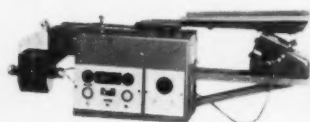
Factories at  
425 Greenpoint Avenue, Brooklyn, N. Y.  
3961 South Lowe Avenue, Chicago, Ill.

See us at the Show Booth # 154



## POST DECITRON ELECTRONIC PRODUCTS

Now . . . low cost . . .  
accurate "batch" counting  
for small products.



The PORTABLE FCB-1

The Post FCB-1 is a sorting and counting device which incorporates a Syntron vibrator with a Decitron Preset Counter. Model illustrated utilizes a P2 counter, capable of 'batch' counting small objects in any quantity from 1 to 100.

Very small products can be neatly separated on the special conveyor belt . . . individually counted . . . dropped into a 'hold' tray and when the desired count is reached, the entire batch is fed into a waiting box, bag or other container. This latest Post development will feed 300 to 1000 pieces per minute and is portable! Size: only 53" long, 18" high, 12" wide. Cost as shown, \$3500.

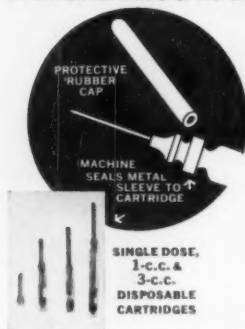
Post will be glad to furnish quotations for models capable of counting larger batches.



## ELECTRONIC PRODUCTS DIVISION

Post Machinery Co., 159 Elliott St., Beverly, Mass.

ETHICAL DRUG MANUFACTURERS . . . will be interested in this



## NEW FULLY AUTOMATIC "NEEDLE CAPPER"

Now, for the first time . . . doctors, nurses, dentists, and hospitals can administer hypodermics without fear of spreading deadly hepatitis, staph' infections—from a reused needle.

SHIELDS' Needle Capper (below) is a completely sterile operation. This unique machine which automatically puts protective cap on and seals metal sleeve to glass cartridge (see illustration, left). This cartridge becomes a complete, self-contained hypodermic, with retractable plunger, sterile container of medication and needle, ready-for-use. It provides doctors, dentists and hospitals with the first and only, truly-sterile, disposable hypodermic. Makes ideal first aid kits for the field. For complete technical information on the many distinctive features and performance of the SHIELDS' Needle Capper.



Write: Dept. MP-1

## AMPOULE MACHINE CO.

38-09 24th Street, Long Island City, New York, STillwell 4-0663

## Plants & People [Cont'd]

pressure-sensitive labeling and printing machines. Elliott produces the Seal-master semi-automatic and automatic short-case sealers.

A 50,000-sq.-ft. plant for the manufacture of packaging machinery is under construction in Woburn, Mass., for the Cryovac equipment div. of W. R. Grace & Co., Cambridge, Mass.

Gibraltar Display Div., Mead Containers, reports that its production facilities have been transferred to Gardner, Mass., for integration with the parent firm.

The Sealright-Oswego Falls Corp. of Fulton, N. Y., has purchased the Nashua Corp.'s interest in Canadian Sealright Co., Ltd., of Peterborough, Ont. S. J. Whitehouse has been elected pres. of the Canadian division.

A new research and development center is being constructed in Commack, L. I., for the Lily-Tulip Cap Corp., New York. Completion is expected soon.

Crown Cork & Seal Co., Philadelphia, has established a new sales region to cover Colorado, Kansas, Missouri, New Mexico, Oklahoma, Texas and Arkansas. Leonard S. Martin has been named mgr. of the new Southwest Region. Eldon E. Blunt succeeds Mr. Martin as mgr. of St. Louis district sales.

Consolidated Paper Co., Monroe, Mich., has opened a branch plant in Bremen, Ind. Corrugated sheet, plain and printed corrugated containers and die-cut parts are being produced at the plant.

Sheffield Tube Corp., New London, has received a safety award and a special commendation from Connecticut's Governor Abraham Ribicoff. The company was honored recently for completing 1,000,000 man-hours without a lost-time accident.

Dura-Lee Corp. has moved to a new location in Kansas City, Mo. The company converts polyethylene and other packaging materials.

A new shipping-container plant is being constructed in Phoenix by Fibreboard Paper Products Corp., San Francisco. Completion is scheduled for March. Cecil E. Graham has been named mgr. of a newly formed packaging sales district to serve the Arizona area.

Berles Carton Co., Paterson, N. J., has opened sales-development headquarters at 375 Park Ave., New York.

To serve the steel-shipping-pail and tinplate-can needs of the Western U. S., a new manufacturing facility, Vulcan Containers Pacific, Inc., has been established in San Leandro, Calif., by Vulcan Containers, Inc., Bellwood, Ill. Lawrence M. Ferguson is pres. and sales director.

Sherman Paper Products Corp., Newton Upper Falls, Mass., has con-





## Look-alikes in all three sizes

Some time ago Northern Tissue adopted the painting of a child's head for its packages, in one, three and four roll sizes. By printing in gravure from three sets of Intaglio cylinders, Northern Tissue is assured of the identical infant on every wrapper.

Three sets of Intaglio cylinders have printed 80,000,000 wrappers, should be good for many millions more. Intaglio cylinders have a longer life, give more impressions, are far more economical for long runs than any other reproduction medium.

Check the supermarkets, and

see how many of today's best sellers are in gravure packages. And remember that Intaglio produces more gravure labels, wrappers and cartons than anyone in the business.

FOR the best in gravure, depend on Intaglio. Why? More than twenty years experience. Pioneers in perfecting gravure reproduction methods. A skilled staff of 500—35% with us ten years or longer. Five entirely new plants in the past five years, in New York, Chicago, Detroit, Cincinnati and Boston.

And eight offices, conveniently close, at your service.

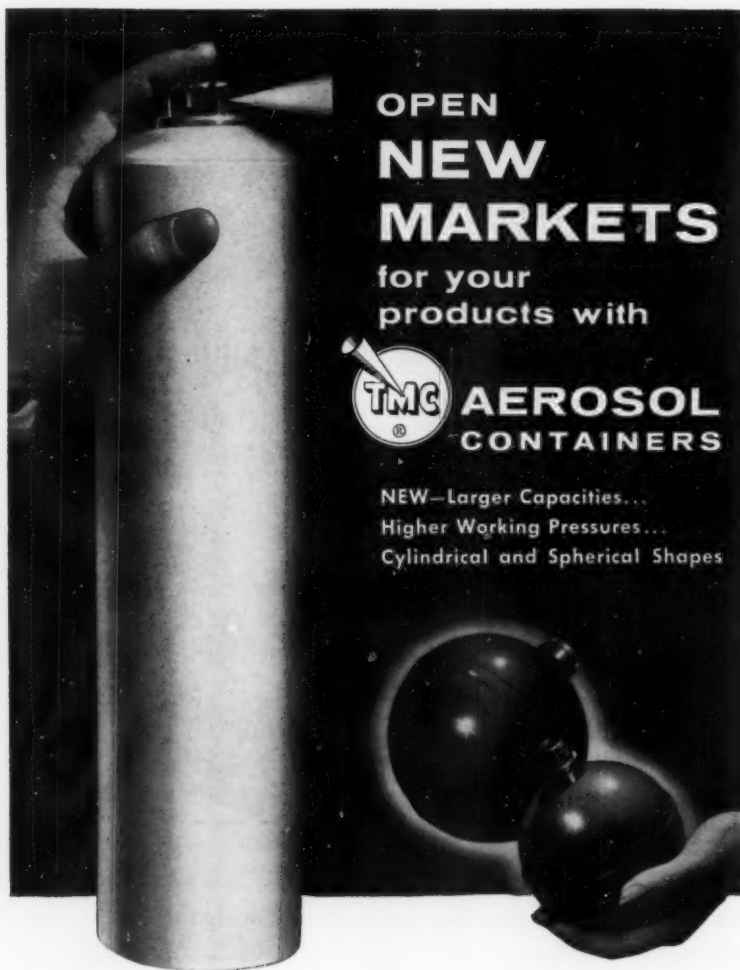


## Intaglio Service CORPORATION

*America's First Gravure Servicers*

305 East 46th St., New York, New York—731 Plymouth Court, Chicago—40 Hague Ave., Detroit—  
1828 Lewis Tower Bldg., Philadelphia—126 West McMicken Ave., Cincinnati—  
1932 Hyperion Ave., Los Angeles—369 Pine St., San Francisco—Crescent St., Chelsea, Massachusetts





## OPEN NEW MARKETS

for your  
products with



**AEROSOL  
CONTAINERS**

NEW—Larger Capacities...  
Higher Working Pressures...  
Cylindrical and Spherical Shapes

### KING SIZE CYLINDERS

For working pressure up to 240 psi •  
ICC Approved • Quantity Production  
sizes include 2, 3, 5 and 10 pound water  
capacity • Other sizes on request.

### NEW SPHERICAL DIS- POSABLE CONTAINERS

For working pressures up to  
1750 psi • ICC Approved •  
Various sizes.

**Millions of TMC disposable  
containers are building sales  
in this new merchandising era**

TMC Disposable Containers are produced in large volume,  
built to standards that fit automatic filling machines. They  
may be the solution to the packaging and marketing prob-  
lems of your old or new products.

WRITE or phone for prices; give size, pressure and quantities re-  
quired. Ask for helpful Selection Guide No. DC-559.

**TUBE MANIFOLD**  
CORPORATION  
433 BRYANT STREET • N. TONAWANDA, N. Y.

## Plants & People [Cont'd]

cluded a license agreement with the Orchard Paper Co., St. Louis, for the manufacture of latex-coated cohesive papers under Sherman patents.

Pro-Pak, Portland, Ore., is a new company which will sell, install and service Horix Mfg. Co. packaging machinery on the West Coast.

Bell-Mark Corp., manufacturer of coding and printing attachments and automatic marking machinery, has moved to larger quarters at 18 Ropes Pl., Newark, N. J.

The Champion Paper & Fibre Co., Hamilton, O., is building a new research center near its general offices in Hamilton. Occupancy is planned for some time this year.

The Dow Chemical Co., Midland, Mich., has formed a sub. company to manufacture polystyrene in Greece. The facility, to be held financially by Dow Chemie, A. G., of Basel, Switzerland, is expected to commence operations early in 1961.

Hoerner Boxes, Inc., Keokuk, Iowa, has completed a new sheet plant in Tupelo, Miss. Forrest R. Hamilton is gen. mgr. of the operation.

The Packaging Div. of Olin Mathieson Chemical Corp., New York, has completed transfer of corrugated-container-production facilities from Essexville, Mich., to a new plant in Owosso, Mich.

Packaging Services, Inc., Wilmington, Del., has opened a new packaging plant in Wilmington. The firm, headed by A. J. Gordon, provides contract packaging and printing services as well as flexible-packaging equipment.

St. Regis Paper Co., New York, is constructing a new bag plant in Los Angeles. The new facility will have double the capacity of the present plant.

The Visking Co. Div., Union Carbide Corp., New York, is expanding its facilities for production of cellulose sausage casings at its Loudon, Tenn., plant.

Regal Plastic Co., manufacturer of formed, fabricated and deep-drawn thermoplastic sheet items, has moved to a new location at 1725 Holmes St., Kansas City.

### Promotions

Henry W. Cox: to sales supv., A. H. Wirz, Inc., Chester, Pa. Wirz reports that the new position was created because of the company's expansion into new areas of packaging manufacture. These include plastic bottles and tubes and other specialty plastic containers.

A. T. Buskens: to v.p., Chicago office, Pneumatic Scale Corp., Ltd., located in Quincy, Mass.

Claude L. Alexander: to v.p., American Can Co., New York. He will con-



A Hanes men's underwear in-store display of their new line of edge-sealed polyethylene underwear packages.

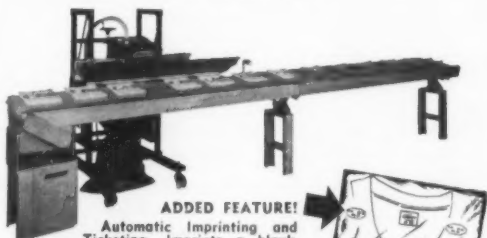


# THE MOST BEAUTIFUL POLY

**PACKAGE... is a tight-to-product Edge-Sealed Polyethylene Package!**

produced automatically on an  
**AMSCOMATIC<sup>®</sup> 100**  
**PACKAGING UNIT**

A new, exclusive development for tight-to-product poly bag packaging.



The Amso Method is the **FIRST** production line packaging set-up for packaging products in polyethylene bags.

- Produces a strong, straight, clean-cut edge seal closure and simultaneously removes and disposes of the skirt or lip above the edge seal.

- Intake conveyor can be supplied in lengths necessary to accommodate from 1 to 5 bag loaders.
- Speeds variable up to 100 feet per minute.

Write Dept MP for details and list of users.

**Amso**

**AMSCO PACKAGING MACHINERY, Inc.**

31-31 48th Avenue • Long Island City 1, N. Y.

REPRESENTATIVES IN PRINCIPAL CITIES

See us at Booth #516 at the AMA Show



## Consult Mack for Special Packaging

If you have a packaging problem, or special packaging idea, Mack Molded plastics may be the solution. Mack technicians offer a 3-way service on product packaging, custom closures and merchandising sales aids. Mack will assist in the development of your idea, make recommendations on materials selection and collaborate on design. For help based-on-experience, just call or write outlining your problem.

## Standard Closures Available from Stock

Mack molded plastic closures, in all stock sizes, are available for prompt delivery. Select the design best suited to your product from the wide variety offered by Mack. Samples promptly on request: address Mack Molding Company, Inc., Wayne, N. J.

Serving Industry for Over 35 Years

Plants at -

WAYNE, NEW JERSEY  
ARLINGTON, VERMONT  
WATERLOO, P.Q. CANADA

**MACK**  **Molded Excellence**





## ABSOLUTELY ACCURATE 2 VALVE FILLER



The Perfect Filler for Glass,  
Plastic and Tin containers.  
Accurate Ingredient Fill for  
Aerosol Packing



Write for  
complete literature

**ELGIN  
MANUFACTURING  
COMPANY**

200 Brook Street • Elgin 2, Ill.

The Elgin "Twin" is a rapid, faultless producer. This Filler features a unique method for controlling the piston stroke, resulting in two speeds: high-speed on cylinder filling, low-speed on container filling. Easily adapted to a broad range of products and container sizes, the Elgin "Twin" insures an accuracy of fill you can rely on for either liquid or viscous products. Easily cleaned—ideal for light or heavy packs and ideal for aerosol packing—the Elgin "Twin" earns its way in labor and product savings!

## VULCAN HEATING UNITS - The Heart of Packaging and Sealing Machinery



Vulcan Electric Units provide low cost efficient heating for any application in packaging and sealing equipment. Flat or strip, cartridge, tubular, and band type heaters are available in a wide range of sizes, shapes, sheath and insulation materials, voltage and wattage ratings.

Write for FREE Catalog



**ELECTRIC COMPANY**

DANVERS 30, MASS.

## Plants & People [Cont'd]

tinue to supervise operations of the Bradley-Sun Div. and will headquarter in Hillside, N.J.

Frank Edgerle: to mgr., distributor sales, Kleen-Stik Products, Inc., Chicago. Wayne Lasinski: to Midwestern sales manager.

P. N. Smith: to asst. products sales mgr., non-food can group, Continental Can Co., New York.

Homer F. King: to v.p. of sales, Advertising Metal Display Co., Chicago. Mr. King will continue as gen. sales mgr.

Raymond Lumley: to paper-industry mgr., Signode Steel Strapping Co., Chicago. He will coordinate sales and service to the paper industry.

Paul Clark: to tech. director, Crystal Tissue Co., Middletown, O.

A. R. Jorgensen: to sales mgr., North Atlantic district, National Can Corp., Chicago.

Joseph T. Loomer: to mgr., bleached-board technical development, Continental Can Co., New York.

Lowell H. Brooks: to Midwest sales mgr., specialty div., Container Corp. of America, Chicago.

Melvin R. Whitman: to Northwest branch mgr., Portland, Ore., Canning Machinery Div., Food Machinery & Chemical Corp., San Jose, Calif. He was formerly Northwest district sales manager in Seattle. The Seattle office has been closed.

Stan L. Kaufman: to sales mgr., New York Metropolitan area, Gilman Paper Co., New York. Tom E. Morris: to sales mgr., Southeast area, Charlotte, N. C. Robert E. Bringman: to sales mgr., specialty papers division.

Henry B. Puff: to mgr., field sales, Durez Plastics Div., Hooker Chemical Corp., Niagara Falls, N. Y. Richard W. More succeeds Mr. Puff as asst. product mgr. for Durez resins.

Frank L. Sherman: to asst. product mgr., laminated-foil sales, Kaiser Aluminum & Chemical Sales, Inc., Oakland, Calif. J. Robert Kitchen: to asst. product mgr., container sales.

Henry P. Trounstone: to gen. mgr., Extruded Film Div., Clopay Corp., Cincinnati.

Frank T. Cantrill: to mgr., Detroit, Glass Container Div., Owens-Illinois Glass Co., Toledo.

Charles Weissert: to mgr., Southeastern Region, Sutherland Paper Co., Kalamazoo, Mich.

David K. Evans: to asst. sales mgr., The Specialty Papers Co., Dayton, O.

Robert M. Tyson: to v.p., Tubed Chemicals Corp., Easthampton, Mass. The company does contract packaging



# NEW!

# STIK-ON BLISTER PAC

another  
packaging  
first  
from  
Jackmeyer

NOW... put more  
"SEE and SELL" in your package  
this fast, low-cost way!

This newly developed hand-seal process makes blister packaging so economical, simple and adaptable, that its advantages are available to a wide new range of products and production situations. Light hand pressure on the Stik-On Blister's pressure-sensitized flange bonds blister and card perfectly and permanently... displays your product to full advantage, and protects it completely. Everything supplied to you for fast, easy assembly in your own plant.

#### JACKMEYER—ONE COMPLETE SOURCE FOR ALL TYPES OF BLISTER PACKAGING

The new Stik-On Blister Pac is the result of Jackmeyer's continuous research and experience in every type of blister packaging: Heat-Seal, Foldover, Skin, and now the new pressure-sensitive Stik-On Blister. Every step is quality controlled... from creative design, forming of blister, printing of card, coating... all under one roof. Jackmeyer, single source service assures you uniform quality and dependable delivery. Mail coupon for full details.

Visit us at **BOOTHS 1522-24, AMA National Packaging Exposition**  
April 4th to 7th, Convention Hall, Atlantic City, New Jersey.

THE **Jackmeyer**

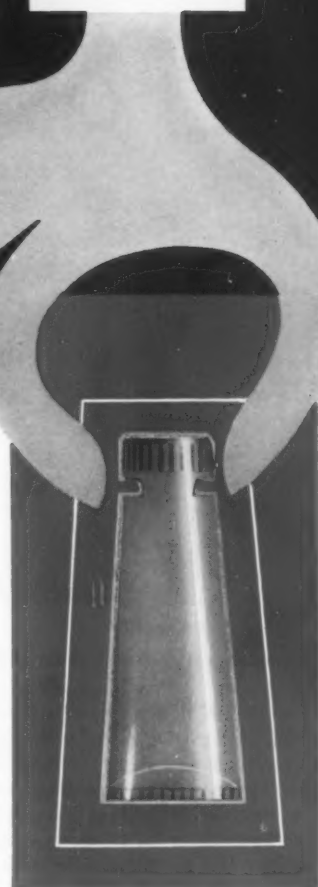
Branches in Principal Cities

CORPORATION

253 West 26th St., New York 1, N. Y. • WATKINS 4-0265

A Complete Service from Creative Art to Finished Product

Display Packaging • Foil Labels • Tags • Specialty Printing  
in Gravure, Letterpress, Offset Lithography Since 1918



Pressure-Sensitive Stik-On Blister  
**SEALS TIGHT**  
**WITH LIGHT HAND PRESSURE**  
**NO SKILL, NO EQUIPMENT,**  
**NO HEAT NEEDED**

ATTACH TO YOUR LETTERHEAD AND MAIL

Please send full details on JACKMEYER'S STIK-ON Blister Packaging.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_



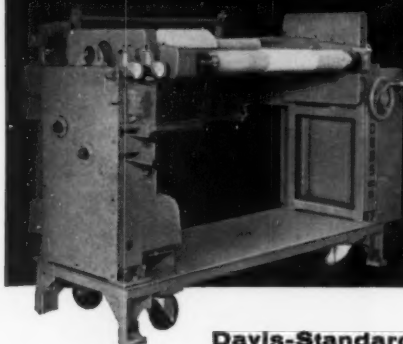
# HOBBS 44" "Versawind"

with Model 25T  
**Davis-Standard  
Thermatic\* Extruder**  
in film winding operation

**Booth 613  
Packaging  
Show**

More  
For Your  
Winding  
Money!

**44" Hobbs "Versawind"  
at Davis-Standard  
A CLASSIC EXAMPLE!**



Hobbs does give you more for your winding money and here is proof positive!

The 44" Hobbs Versawind shown here is joined to a Thermatic Extruder, Die and Blown Film Tower manufactured by Davis-Standard, a division of Franklin Research Corporation of Mystic, Connecticut. Operating on a 5-day a week basis, the unit tests batches of thermoplastics sent in by extruder customers and runs pilot extruder tests.

## Davis-Standard reports

"We selected this Hobbs winder because, in addition to the greater output that it permits, we get more control and range, which are essential for our testing purposes. Every batch of material we run requires a slightly different set-up and the Hobbs Versawind adapts quickly to whatever the tolerance requirement may be."

In fact, Davis-Standard is so confident that Hobbs is the best film winding machine for the money that it offers its famous "Thermatic" Extruder, Die and Blown Film Tower and the Hobbs Versawind as a packaged assembly.

Hobbs builds winding drives and stands from the ground up to best fit your requirements. Hobbs manufactures all types of web winding equipment with all types of winding drives, stands and tension controls (electrical, mechanical, hydraulic, etc.).

\*Patented



Ask for "Principles and Practices of MODERN WINDING." A copy is yours on request. Get More Winding For Your Money!

**MANUFACTURING COMPANY**

27 Salisbury Street, Worcester 5, Massachusetts

Representatives in Irvington, N. J., Chicago, Cleveland, Greenville, S. C., Louisville, Los Angeles, Toronto and other Principal Cities

WINDERS • WINDING STANDS • HAND & POWER SHEARS  
SLITTERS • AUTOMATIC CUTTERS • DIE PRESSES

## Plants & People [Cont'd]

in glass, metal and plastic containers and metal tubes. It also does blister packaging.

### Appointments

**Arthur Pezzoli:** from Scott Paper Co. to v.p. of mfg., Dietz Machine Works, Inc., Philadelphia. The company has moved into new quarters at 20 W. Berkley St.

**Alfred Slatin:** from Equitable Paper Bag Co. to Eastern sales mgr., Extrudofilm Corp., Long Island City, N.Y.

**John L. Nichols:** to chief packaging designer, Associated Industrial Designers, New York.

**Norman Cooper:** from General Printing Ink Co. to tech. service director, Paramount Packaging Corp., Philadelphia.

**Robert Price:** to mgr., Atlanta, Aluminum Foils, Inc., Jackson, Tenn.

**C. J. Lee:** from Avery Label Co. to Eastern regional sales mgr., Morgan Adhesives Co., Stow, O., sub. of Bemis Bro. Bag Co.

### Obituaries

**Kendall D. Doble, Sr.,** pres. of Pneumatic Scale Corp., Quincy, Mass., died suddenly Jan. 14 in London, England, while on a business trip. He had been chief exec. of the packaging-machinery-manufacturing firm since 1947. He joined the company in 1919 and became mgr. of the English sales office two years later. Mr. Doble was v.p. and gen. mgr. of Pneumatic Scale for 15 years before becoming pres., succeeding his father, the late William H. Doble, who founded the company in 1895.

**Doble**

**Hugh J. Chisholm,** chairman of the board of Oxford Paper Co., New York, died Dec. 23. He was 73 years of age. Mr. Chisholm became pres. of Oxford Paper in 1912, a post he held until 1956 when he was elected chairman. He was a v.p. and member of the exec. committee of the American Paper & Pulp Assn.

**Frank C. Rowley, 54,** died Jan. 7 in Buffalo, N.Y. He was product mgr. for molding compounds in the Durez Plastics Div. of Hooker Chemical Corp., Niagara Falls. Mr. Rowley, who had been associated with the company since 1936, was a member of the Society of Plastics Engineers and of the Society of the Plastics Industry.

**Dr. Charles W. Boyce,** former exec. secy. of the American Paper & Pulp Assn., died in New York Jan. 11. He was 66. Dr. Boyce was with APPA from 1928 to 1940. Since 1944 he had served as a consultant in the paper field.



# CHEAP PACKAGING COSTS TOO MUCH



Does packaging automatically become satisfactory to you because "the price is right?"

Or do you measure packaging satisfaction by the way it withstands rough treatment...its handling ease, its adaptability on the production line...stackability,

storeability, its quick identification... your customer's complete approval.

It's to your interest to look into the Metal Edge Method. You'll find it does considerably more than conventional packaging because it's:

- made of tough SUPERFIBRE board reinforced with Metal Edge stays for super-strength
- compact, easy to handle, extremely lightweight for its rugged durability
- easy to stack, easy to store, saves time and labor
- versatile for a thousand and one products
- HIGH GLOSS CELOLUSTRE-treated (where necessary) for resistance to soiling, moisture, mild acid and abrasion
- saves up to 90% in storage space because boxes are delivered in "flats"

Because of our unique method of printing on colored kraft, your package enjoys real distinction, enhanced appearance and prestige.

*Call or write today for a Free METAL EDGE Packaging Survey.*

If you're going to the **AMA Show**, stop by **Booth #446**. We'd like to show you the Metal Edge Method at work. Please let us know if you need tickets. We'll be happy to send them to you by return mail.

**METAL EDGE INDUSTRIES**  
60 Gloucester Road, Barrington, N. J.



Chicago, Illinois / Van Nuys, California / Fort Wayne, Indiana / Richmond, Virginia



**From Analgesics...**



## **The magic touch of aerosol packaging**

Practically every time you enter a drug store nowadays, more and more aerosol packaged drug and cosmetic products appear on the shelves and counters. Not just new products. But well known, established brands as well. And with good reason! For these products are "better" in aerosol form. They're easier to use and more acceptable. They generate more sales and yield a higher margin of profit.

### **The booming aerosol drug market**

For the second year in a row, pharmaceuticals were the fastest growing of all aerosol groups—showing a sales increase of 50% in 1958 over 1957, compared to a 20% increase for all aerosols. And the market is still growing fast for a host of aerosol pharmaceuticals, such as external analgesics, spray-on bandages, athlete's foot medication and nasal sprays. It is expected that aerosol drug sales will reach \$200 million by 1961!

### **Tremendous growth of aerosol cosmetics**

Aerosol packaging has a magic touch in helping to

sell products for women. Hair sprays are the largest selling single aerosol product group—115 million units in 1958\*. Aerosol colognes and perfumes have proved phenomenal sellers—shooting up from 5.4 million units as recently as 1955 to 28 million units in 1958\*. Aerosol hand lotions and creams are showing a similar increase, as are aerosol personal deodorants.



### **How to "enter" the profitable aerosol field**

If *your* product can be sprayed, brushed on, daubed, poured or dusted—you, too, may be able to share in the spectacular success of aerosol packaged products. Here's how General Chemical, one of America's leading producers of aerosol propellants, can help you enter the profitable aerosol field:

**Market information**—Helpful facts and figures on the aerosol market for many types of drug and



...to Alluring  
Perfumes



**yields bigger sales . . . higher profits!**

cosmetic products are available to present and potential aerosol marketers.

**Expert technical service**—General Chemical has one of the most complete aerosol development laboratories in the country. We will be glad to help you develop the right propellant and formulation compatible with your product, its container and its uses.

**New product ideas**—The results of continuing research into new and improved aerosols—including information about promising new aerosol formulations developed in our "Genetron" aerosol propellant laboratories—are available in "Genetron" aerosol propellant Product Information Bulletins covering many types of aerosol products. Write for a complete list of "Genetron" aerosol propellant Bulletins presently available.

**Contract fillers**—We will also be glad to put you in touch with highly capable contract fillers in all parts of the country who will put up your product in aerosol form for test marketing and handle full

scale commercial production as well. *You don't have to invest a cent in plant, special equipment or personnel when you work with these contract fillers!*

Why not take advantage of these valuable services from General Chemical *now*? Call or write us today for a confidential discussion of your requirements.

\*Estimated by Market Surveys Department,  
General Chemical Division, Allied Chemical Corporation

**genetron<sup>®</sup>**  
aerosol propellants

Putting the "push" in America's finest aerosols



**GENERAL CHEMICAL DIVISION**  
40 Rector Street, New York 6, N. Y.

Visit our Genetron Booth (#1345, 1347, 1349, 1353) at the National Packaging Exposition, Convention Hall, Atlantic City, April 4-7



## Equipment & Materials

[Continued from page 68]

forms of bleached, moisture-absorbent cellulose wadding. Another recently improved material, says the supplier, is its C-B Laminate wadding, which is made by a patented procedure for multi-layer bonding that reportedly provides high continuing bulk and unusual resistance to separation and shredding. Also to be shown is a compressometer for measuring resistance to deformation during repeated cycles of compression and recovery, such as a cushioned product would encounter in transit. *Cel-Fibe Div., Personal Products Corp., Milltown, N.J.*

### Automatic label imprinter

Avery Label will introduce the Etiprint Super automatic label-imprinting machine at the Packaging Show next month. The compact new unit imprints labels with any desired data as they are needed, thereby reducing inventory to a minimum, the supplier points out. In fully automatic operation, the table-top machine will imprint any size label from 1½ by ½ in. to 4¾ by 4½ in. Printing is done from type or rubber plates, and change-over for different label sizes is reported to be a simple procedure. Other characteristics cited for the unit are: three- or five-roller inking system, automatic stop-counter, variable-speed motor and automatic rewind. *Avery Label Co., Div. Avery Adhesive Products, Inc., Monrovia, Calif.*

### Versatile new printing unit

At the Packaging Show next month, Mosstype will introduce the Series M-7 Moulder Proofer, a machine for setting up rubber-plate printing jobs and proofing them. New features incorporated in the unit, says its supplier, increase its versatility, ease of operation, rigidity and accuracy. Among these is a movable inboard bearing that makes the machine suitable for cylinders of different face widths. *Mosstype Corp., Waldwick, N.J.*

### Improved padded shipping bag

A new and improved Jiffy padded shipping bag will be introduced at the Packaging Show next month by Jiffy



Mfg. Among the bag's cited improvements is a tear-tape opening device. The bag's outer liner stock is yellow-colored stretchable kraft paper. The supplier reports that by sealing the bag's back seam with instant-setting hot-melt adhesive, size of the back-seam lap has been reduced from 1 in. to ½ in. The adhesive and the extrusion system which applies adhesive to bag seams (both supplied by National Starch & Chemical Corp.) make possible faster production and greater bag strength, says the company. *Jiffy Mfg. Co., Hillside, N.J.*

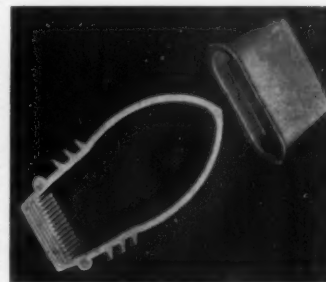
### Punched-tape stencil marking

Suggested for use by packagers in the marking of addresses on shipping cases is Marsh Stencil Machine's new Stencil-mation. It is an automatic stencil machine that will cut shipping stencils, without an operator, by means of a punched tape. The unit will be demonstrated at the Packaging Show next month. In operation, the machine "reads"

punched tape prepared by typewriter as the order is typed. Each row of hole combinations across the tape represents a coded letter, numeral or space. The unit's automatic reader checks hole combinations one line at a time and feeds the data to a translator attachment which, in turn, signals the stencil machine to seek and cut the selected character. Stencils can be one to four lines. The new system, says the supplier, is adaptable to stencil machines marking letters of ¼-, ½-, ¾- and 1-in. height. *Marsh Stencil Machine Co., Belleville, Ill.*

### Polyethylene fastener for bags

A re-usable polyethylene bag-fastening device is being marketed by Polytop Corp. The two-piece unit can be seen at the Packaging Show next month. It consists of a loop



section and a sliding lock cap. In use, the gathered-in bag end is slipped through the loop and bent down over the loop's sawteeth base. Then the cap is placed over the loop and slid down until it locks. Projections on either side of the plastic loop hold the cap securely in place. This device holds the bag (paper, plastic, cloth or other) firmly, and the loop provides a convenient finger hold or hang-up unit, says the supplier. Called Bip Miracle Clip, the closure is suggested for use with many bagged products. It is available in varied colors and sizes. Price is \$6 per thousand, in lots of 500,000 or more, says the company. *Polytop Corp., Hingham, Mass.*

### Two rotary aerosol fillers

Two new automatic rotary machines for aerosol packaging will be introduced at the Packaging Show by Kartridg-Pak's Mojonner Associates Div. They are a combination pressure filler and vacuum crimper and a combination pressure filler and tip applicator. Both are reported to operate at more than 100 containers per minute. In the former machine, the crimping head will not operate unless a vacuum can be drawn on the can. This, it is said, prevents any attempt to close a can on which the valve is not seated properly. Pressure filling is accomplished in the remaining part of the rotation cycle. The tip-applicator machine is claimed to speed up the operation of affixing the pressure-release button to the filled can. The supplier points out that the automatic unit offers packaging-line economies with this action, which is normally performed manually by several workers on high-speed aerosol lines. *Mojonner Associates Div., Kartridg-Pak Machine Co., Franklin Park, Ill.*

### Pinked aerosol dip tubes

Aerosol dip tubes that are pinked-cut, or notched, at the bottom to prevent closing up of the tube opening against the bottom of the container are available from Anchor Plastics. The opening extends a fraction of an inch up opposite sides of the tube wall, to insure free product flow. Primary advantage of the pinking, says the supplier, is that dip tubes can now be made the full depth of the container, so consumers can make full use of its contents. Straight-cut tubes must be cut off slightly short of full depth to eliminate the closing-up problem, says the company. Available in diameters and wall thicknesses to fit all



# Biggest Packaging Papers Selection Ever!

5200\* Grades of Krafts, Glassines, Greaseproofs, Waterproofs—in functional combination with Poly / Foil / Films / Cello / Wax / Asphalt / Stainless Laminants and others

## POUCH PAPERS



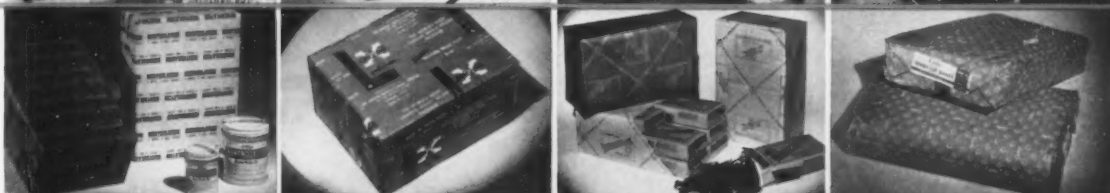
## CARTON LINERS



## SPECIALTY BAGS



## BULK WRAPPING



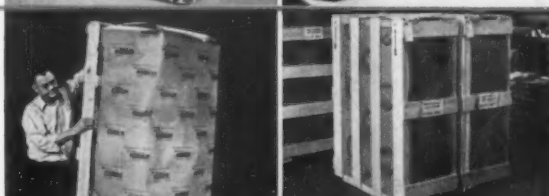
## INDUSTRIAL WRAPS



## RETAIL WRAPS



## STORAGE & SHIPPING



\* And even more — for new grades are in constant development. If we don't have the protective papers you need, Thilco will make a grade to meet your own specific requirements.

### THILCO PAPERS INCLUDE:

- WRAP-DRI  
Waterproof protective papers
- THILCO-TUF  
Stainproof laminated papers
- VAPOTITE  
moisture-vapor barrier papers
- POLY-COATED  
and special treated papers
- MG and MP  
natural and colored krafts
- GLASSINE  
and greaseproof papers
- SPECIAL BAGS  
and case liners



**THILMANY PULP & PAPER COMPANY**  
KAUKAUNA • WISCONSIN

NEW YORK • CHICAGO • DETROIT • BOSTON  
CLEVELAND • CINCINNATI • CHARLOTTE

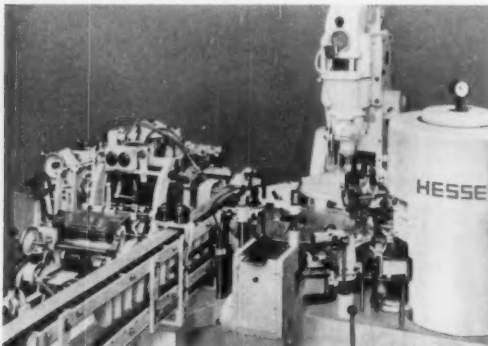
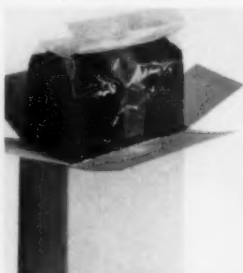


## Equipment & Materials [Continued]

aerosol valves, the flexible polyethylene tubes are supplied in bulk in corrugated cartons. *Anchor Plastics Co., 36-36 36th St., Long Island City 6.*

### Automatic vacuum-packaging machine

From Fr. Hesser comes an automatic vacuum-packaging machine that forms, fills and seals bags, evacuates air from the filled bags, then inserts the bag into a carton which also is sealed. Packaging speeds up to 60 units per minute can be attained without the need for skilled operators, says the German machinery manufacturer. The new machine is suggested for use by packagers of coffee and other dry products that require flavor protection in the package. The bag (see photo at right) formed on the new unit can be made of any heat-sealable plastic film or of foil laminate, says the supplier. After the bag is filled, it is heat sealed closed at the top, except for a small vent in the center. Then it moves on to a separate turret where air is evacuated, after which a complete seal is made and the bag moves on to the cartoning station. After the top flaps are glue sealed, the



carton is discharged on a conveyor (left in larger photo) for case packing. Bag-forming, filling, evacuation and sealing are performed in a continuous operation, the company points out. This new machine, says the company, offers an economical and simple method of producing vacuum packages. *Fr. Hesser Maschinenfabrik A.G., Nauheimer Strasse 99, Stuttgart-Bad Cannstatt, Germany.*

### Acetal resin for blow molding

Du Pont reports that it is now able to supply commercial quantities of Delrin acetal resin. Some standard colors are now available; others will follow in a few months. The material is offered in various grades for molding and extrusion applications. Of interest to packagers is Delrin 150, which is suggested for use in the production of blow-molded bottles. Tensile strength, toughness, resilience and corrosion resistance are among the material's properties, says the supplier. It is reported to retain these properties under a wide range of environmental conditions. *E. I. du Pont de Nemours, Polychemicals Dept., Wilmington, Del.*

### Sealing random-size cases

A new entry in the field of automatic sealing machinery for random-size cases is General Corrugated Machinery's Model T.S. 30-SS. The four-station unit automatically adjusts itself to random-size cases, closes the top flaps and tape seals the top and bottom of the filled case. In consecutive operation, the case to be sealed first travels into the machine's sensing station, where it is sensed for size, then

travels by straight-line conveyor to a station where the outer flaps are closed and on to another station for tape sealing, after which the sealed case is discharged. *General Corrugated Machinery Co., Palisades Park, N.J.*

### Corrugated case-and-cooler

Stone Container offers "Kold Keg," a moistureproof corrugated container for canned beverages that can be packed with ice by the purchaser to keep the beverage cool on picnics or other outings. Available in several sizes, the container is made of a special impregnated corrugated board that reportedly cannot be penetrated by water. Thus, it is not affected by melting ice. An inner tray, also moistureproof, prevents leakage of ice water through the bottom. To provide room for inserting ice cubes or cracked ice, the consumer need only remove a few cans from the top tier, says the company. *Stone Container Corp., 4200 W. 42 Pl., Chicago 32.*

### Four new packaging machines

Among the new Verti-Pak packaging-equipment items from Mercury Heat Sealing are: a frozen-food packaging machine, an automatic screw feeder, a weighing device and a unit for packaging rubber bands. The first-mentioned machine weighs, forms and fills polyethylene bags with loose-frozen vegetables such as peas and kernel corn. It can turn out 50 one-pound bags per minute, says the company. The automatic machine comes equipped with automatic scales. Another new unit from the company is an automatic screw feeder and counter. Adaptable to many small-parts packaging machines, it reportedly will count and dispense up to 300 two-inch screws per minute. A third new machine is a sensitive weighing device that will register weights down to a fraction of an ounce. The precision device, says its manufacturer, permits substantial savings in the bulk packaging of very lightweight items. Also available from the supplier is a machine that automatically forms, fills and seals packages of lubricated or unlubricated rubber bands. The bands are dumped in a rotation hopper where they are picked up in small quantities by mechanical arms and carried to vibrators which sift down their number and deliver them in even flow to conveyors. After weighing, the bands are packaged in polyethylene bags which are then sealed on the machine. Packaging speeds up to 35 bags per minute can be achieved, says the company. *Mercury Heat Sealing Equipment Co., 2601-21 N. Howard St., Philadelphia 33.*

### Impact and temperature recorder

Designed to measure and monitor the impacts and temperature variations encountered by delicate equipment during shipment or storage is Santa Barbara Instrumentation's Model ES-101 Environmental Recording System. The unit is applicable to the transportation of shipping containers and other items which are subject to concealed damage from shock and wide temperature variations. Additional information about the recording equipment is offered by *Santa Barbara Instrumentation Corp., 411 State St., Santa Barbara, Calif.*

### Heavy-duty imprinting attachment

Algene Marking Equipment's production-line Spot Coder is claimed to maintain perfect register and imprinting quality while operating at speeds up to 35 imprints per minute. Designed for heavy-duty use, it marks cartons, cases or products on the production line. The one-piece attachment, which has no return spring, features a large ink fountain, a drip-prevention ledge and a type reserve. Imprinting is done with interchangeable rubber type or quick-change strips, reports the coder's manufacturer. *Algene Marking Equipment Co., Garfield, N.J.*

### Plastic-film blanking press

Reduction of scrap is the objective of a new Emhart press for blanking thin plastic sheet. The unit is equipped with a continuous roll-feed and automatic scrap cutter, for blanking printed or unprinted plastic film at reported rates



# ALL IN ONE PLANT

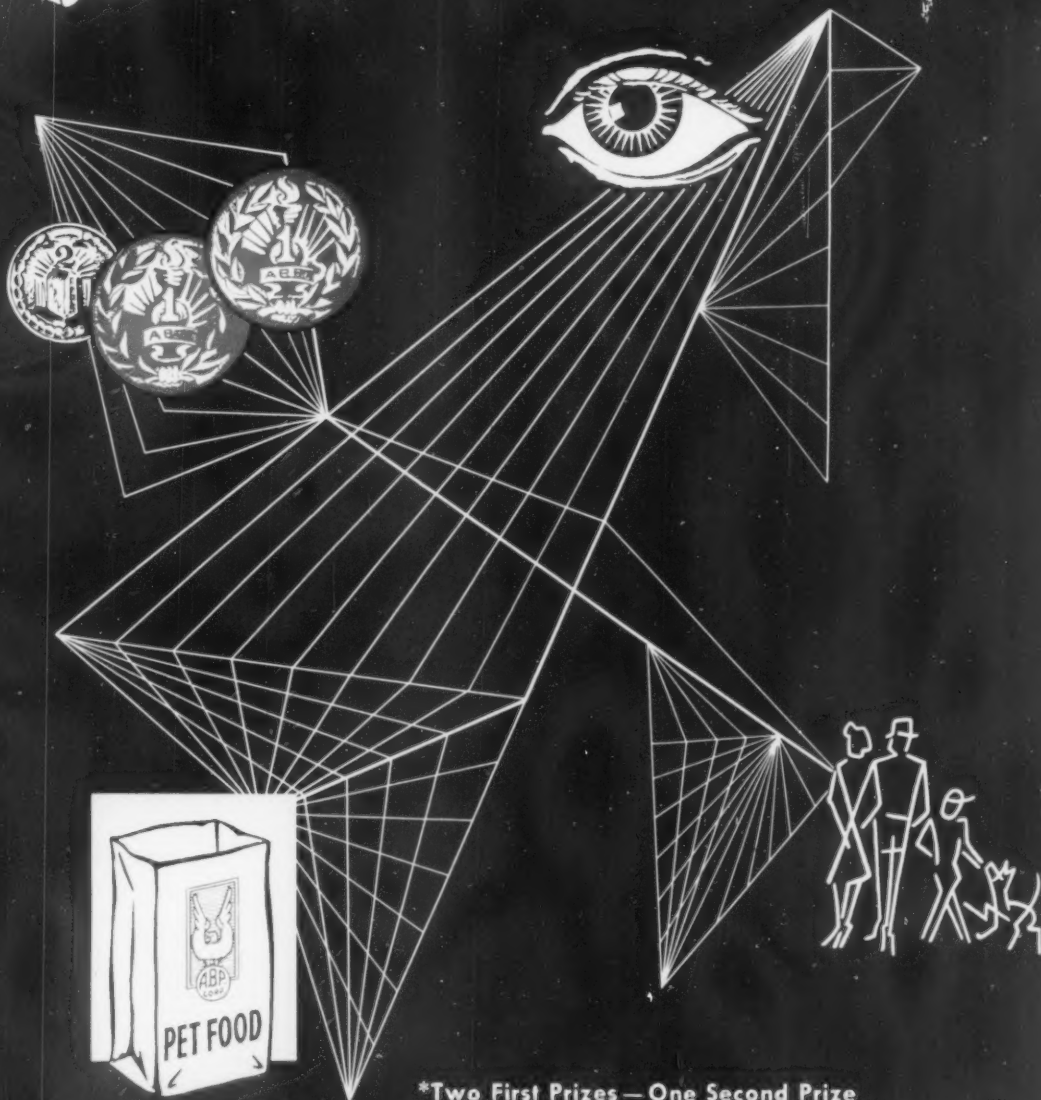


Having added extrusion and rotogravure printing to our existing facilities, we can now produce every known flexible packaging material. Let us prove the advantage of doing business with a flexible, integrated, independent organization. Place your next order with

**ACME BACKING CORPORATION**  
CANAL AND LUDLOW STREETS, STAMFORD, CONN.



# Packaging Winners



**\*Two First Prizes — One Second Prize**

*National Flexible Packaging Contest — 1959*

PAPER BAGS—CUSTOMER, QUAKER OATS CO.

BAGS FOR PREPARED FOODS—CUSTOMER, QUAKER OATS CO.

LAMINATED COFFEE BAGS—CUSTOMER, SAFEWAY STORES, INC.

**PRIZE WINNING AUTOMATIC SPECIALTY BAGS — PRODUCED BY  
AMERICAN BAG & PAPER CORP. Phila. 47, Penna.**





## Equipment & Materials [Continued]

of up to 150 strokes per minute. Material to be blanked can be up to 17 in. wide by 1/16 in. thick. Finished blanks are automatically stacked in chutes for transfer to the magazines of forming machines. Pre-blanking, says the supplier, results in substantial savings in scrap compared with the method of feeding film directly off a roll into a forming machine. Further information is available from *Emhart Mfg. Co., Portland Div., Portland, Conn.*

### Clear-view testing oven

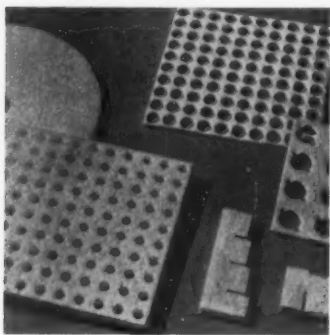
Despatch Oven has introduced a low-temperature (up to 450 deg. F.) laboratory and production-testing oven with an inner glass door that permits continuous observation of the product being tested. It is suggested for use in such experimental work as baking finishes on metal and plastics, when the material must remain in the oven throughout the baking period. Revolving sample holders, externally controllable by means of extension rods, are an additional aid to better observation. The cabinet is available in a range of stock sizes; special sizes can be supplied to order. *Despatch Oven Co., 619 S.E. Eighth St., Minneapolis.*

### Polyethylene grommet for polyethylene bag

A simple, low-cost method for punching reinforced holes in polyethylene hang-up packages has been announced by Tower Packaging. The patented process, called "Poly Grom," reinforces and seals the punched hole in one operation. No metal or other material other than the polyethylene itself is needed. The supplier delivers the finished bag with hole already punched and sealed. The reinforced hole is claimed to be stronger than the packaging material itself and to assure a tight, air-free package seal. Additional data are offered by *Tower Packaging Co., Skokie, Ill.*

### Polystyrene-foam cushioning material

Armstrong Cork enters the internal cushion-packaging field with Resilo-Pak—a white, resilient, lightweight polystyrene foam material. According to the supplier, the flexible material has high energy absorption and will retain its physical characteristics in a temperature range of minus 85 deg. F. to 175 deg. F. Other cited characteristics are that it is dimensionally stable at normal temperatures, has a neutral pH, is non-abrasive, non-dusting and non-hygroscopic. As



illustrated, it can be die cut to form a variety of cushioning or positioning shapes. Suggested for use as a cushioning material for products that are fragile or that require quick and accurate positioning in the package, it is available in thicknesses ranging from 1/16 in. to 20 in., in 1/16-in. increments. *Armstrong Cork Co., Lancaster, Pa.*

### Crush-testing unit

New from Testing Machines is the Hinde & Dauch tester, which can perform such tests as flat crush, ring crush, column compression and ply adhesion. The heavy-duty unit can determine flat crush resistance and stiffness of corrugating paper, board, plastics and other materials for research purposes and quality control. It has three different ranges, from 0 to 100 lbs., 0-500 lbs. and 0-1,000 lbs. Primarily designed for use in the containerboard and box industry, the testing machine also is of value for testing other products, such as compressed chemicals, the supplier says. Additional details are available from *Testing Machines, Inc., 72 Jericho Turnpike, Mineola, N.Y.*

### New carton and filling machine

FMC has developed an automatic high-speed machine to handle the new "Caik-Seal" carton perfected by Packaging Corp. of America. These developments, says FMC, make possible high-volume packaging of such hygroscopic prod-



ucts as dessert powders and cereals in a single-structure carton without inner bag or overwrap. Important packaging economies and greatly increased filling speeds are suggested. The new carton derives its name from a thermoplastic caulking which is applied under the Van Buren ears of the carton, to form a permanently pliable seal that is reported to be both siftproof and an excellent moisture barrier. On the new machine, cartons are snapped open, bottom sealed, filled and top sealed. Speeds up to 300 per minute are possible, says the supplier. A variety of sizes of end-opening carton can be accommodated. Machine models are offered for packaging powders, granules or flakes. *FMC Packaging Machinery Div., Stokes & Smith Plant, 4942 Summerdale Ave., Philadelphia 24.*

### Foil packaging materials for beer

Designed to stimulate beer consumption and sales is the array of new aluminum packaging products which is being offered to packagers by Reynolds Metals. The line-up of new packaging materials includes an aluminum-foil six-pack carry carton, registered embossed foil labels and wrap-around bottle labels. The completely enclosed six-pack carton is designed to project eye appeal and an image of high quality. The registered embossed labels, says the supplier, enhance foil's natural sparkle by increasing light refraction on their irregular surfaces. The wrap-around labels, which provide identity from any angle, are suggested for use with the new, shorter beer bottles. For further details, contact *Reynolds Metals Co., Richmond 18, Va.*

### Hot-melt applicator and tape folder

United Shoe Machinery's new Thermogrip Applicator Model DN is designed for use by packagers of such hygroscopic products as chemicals and fertilizers, where high moisture resistance is necessary. The new unit combines a nozzle-type hot-melt-adhesive applicator and a compact tape-folding device. The tape-folding assembly, with adjustable tape guides, folds and creases the tape over the ends of filled multiwall bags. The applicator works with the tape folder to dispense exactly the right amount of hot melt at the right speed to achieve secure bonding of tape to bag end, says the supplier. The new unit is claimed to offer economy, positive action and ease of use. *United Shoe Machinery Corp., 140 Federal St., Boston 7.*

### Improved multi-gravure press

Among the improvements cited for Frank W. Egan's Simplar multi-gravure press are a new doctor system, a new impression system and a new, high-speed drying device. The unit can handle and splice up to 30-pt. board, with automatic disengagement of each section as the splice passes. The press is available in three models: the S-28, S-40 and S-60. They can accommodate web widths of 29, 41 and 61 in., respectively. Each operates at a rated speed of 1,000 ft. per minute. Simplicity of operation and maintenance, in addition to minimum makeready, are character-

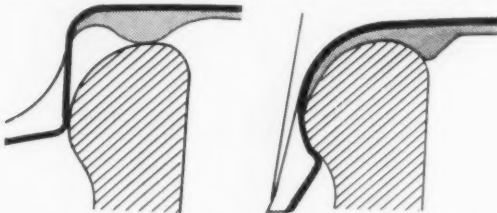


## Equipment & Materials [Continued]

istics of the new press, reports its manufacturer. Specially designed cylinder controls are claimed to permit the use of otherwise defective engravings. *Frank W. Egan & Co., Somerville, N.J.*

### Vinyl-lined crown cap

Crown Cork & Seal reports that its vinyl-lined crown cap will save bottlers \$495 per 33,000-gross carload order, compared with conventional spot crowns. Called Shall-o-Shell, the crown cap is claimed to offer better, more uniform sealing efficiency because it eliminates the possibility of



moisture loss. The diagrams above illustrate progressive steps in applying the cap under a crowning throat. According to the supplier, the vinyl lining is odorless, imparts no taste to the beverage and eliminates the possibility of mold growth. Savings in storage space is another advantage of the crown cap, reports the company. It notes that 60 gross of the crowns can be stored in the same-size carton required for 50 gross of standard spot crowns. *Crown Cork & Seal Co., 9300 Ashton Rd., Philadelphia 36.*

### Two-line marking machine

Soabar's Model 20W is a portable machine for marking pressure-sensitive, gummed or sewn-in labels. It features a newly designed turn-wheel register that offers two lines of dial marking, with up to seven characters per line. In addition, it allows for one line of type at the top of the label, for such constant information as season coding, department numbers, etc. The new machine will accommodate paper or cloth labels ranging in size up to 1 by 1½ in., according to *Soabar Co., 4219 Van Kirk St., Philadelphia.*

### Portable tablet counter

Designed for use by small and medium-size packagers is Salser Engineering's portable capsule-and-tablet-counting machine. Average speed of machine operation is rated at 30 to 40 fifty-count containers per minute. Varying counts, from four to 100, can be attained. Weighing only 28½ lbs., the new machine can be installed on a packing table or over a conveyor line. Among the features cited for the unit are: quick change-over (five minutes); full visual operation from hopper to container; gentle, non-marring, non-powdering action on the product; quick clean-up; low cost and ease of operation. The machine is cast aluminum with plastic contact parts. *Salser Engineering Co., 214 Biltmore Rd., Louisville, Ky.*

### Oriented-polystyrene stock containers

A stock line of 20 oriented-polystyrene containers is offered by Poster Packaging. Ranging in size from 4 oz. to 16 oz. (plus a 24-oz., dome-type container for chicken), the containers are said to be low in cost and to be able to withstand temperatures down to minus 60 deg. F. They are suggested for use in the packaging of frozen foods, ice cream, cottage cheese and various other products. Various closures can be used on the containers, which come in a selection of decorative shapes. Product and brand data can be printed on the plastic packages, or they can be labeled. *Poster Packaging, Inc., 3540 W. Division St., Chicago 51.*

### Multiple-tape applicator

Kleen-Stik's new Multi-Tape Applicator is a machine that automatically applies up to six pressure-sensitive adhesive

tapes simultaneously. The unit comes with three taping heads (it can accommodate three more), an electric sheet counter and a finished-sheet stacker. Optional accessories include an automatic spotting attachment, calibrated spotting disks, additional taping heads and extension feeding shelves. Sheets to be taped are fed under a bar, and tape is applied in the process. The machine can accommodate any stock up to 40½ in. wide, ranging from 3-mil plastic to 62-point board. Reported rate of tape feed is 70 ft. per minute. The unit is suggested for use in the production of self-sticking point-of-purchase displays. *Kleen-Stik Products, Inc., 7300 W. Wilson Ave., Chicago 31.*

### 'Fabric' pressure-sensitive labels

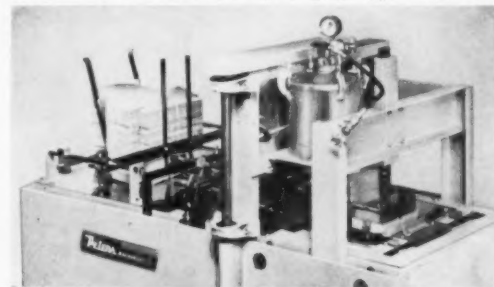
A durable rayon-acetate material gives added strength to Avery Label's new FAB P-5 line of pressure-sensitive labels. Greater strength of the material, the supplier notes, enables the labels to be used in hinging or fastening applications as well as in conventional labeling. The flexible labels are reported to grip tightly to such sharply curved surfaces as bottle necks, metal or glass tubing or rubber or plastic hose. The labels also are printable and can be typed on, written on or rubber stamped. They are suggested for use in the textile industry, because they cling tightly to various fabrics, yet can be pulled away cleanly. *Avery Label Co., Monrovia, Calif.*

### Scroll shear for closure production

E. W. Bliss reports that it has developed a new scroll shear for high-speed automatic production of scrolled strips used in the manufacture of can ends, screw caps and similar metal closures. The Model 1103 increases scrolled-strip production by eliminating the idle stroke between sheets, reports the supplier. The unit will shear sheets up to 36 in. square. Cam-actuated gauges on the machine's first table adapt the scrolled shear to either lithographed or plain sheets. Magnetic feed bars and hardened back gauges are designed to insure precise registry of the sheet for each cut. All strips produced are automatically discharged to a top stacking bin. Scrap from the first cut is collected in a second bin. Further information is offered by the supplier, *E. W. Bliss Co., Canton 10, O.*

### Machine forms trays and cartons

Peters Machinery's Model PG is an automatic machine which converts paperboard blanks into trays or cartons. Designed for moderate-speed packaging applications, the



new unit operates at speeds up to 70 containers per minute, says the manufacturer. Economy and simple design are other features cited for the new machine. It can handle blanks ranging from 5 to 22 in. long and from 3½ to 16 in. wide. A closed glue system eliminates clean-up time. In machine operation, carton or tray blanks are automatically fed from an inclined magazine, glue is applied to end flaps and containers are formed. After the glue is set, finished containers are delivered on a moving conveyor, ready for filling. *Peters Machinery Co., 4700 Ravenswood Ave., Chicago 40.*

### Film bags for pre-packaging

Cellophane/polyethylene bags which reportedly offer convenience and economy in the pre-packaging of such "problem" items as liver, kidneys and seafood, are available from Dobeckmun. The strong, leakproof film bags are designed for easier handling by store personnel and customers. They



# PAPER and BOARD for modern packaging

There's hardly an industry or business that doesn't have some use for some Gilman Paper Company products, produced under sustained quality controls at two fully integrated mills by the third generation of the founding family.

*We Invite Inquiries:*

**BLEACHED SULPHATE BOARD**  
for food packaging, drinking cups, cigarette cartons, milk containers, linerboard, file folders, and others.

**BLEACHED AND UNBLEACHED KRAFT**  
for all purposes including: colored kraft, creped kraft, kraft for laminating, waxing, asphaltting, twisting, wet strength, pH control, water-repellent, insulating, vapor barrier, cable wrap, coin wrap, stuffer paper, masking paper and creped closure tape.

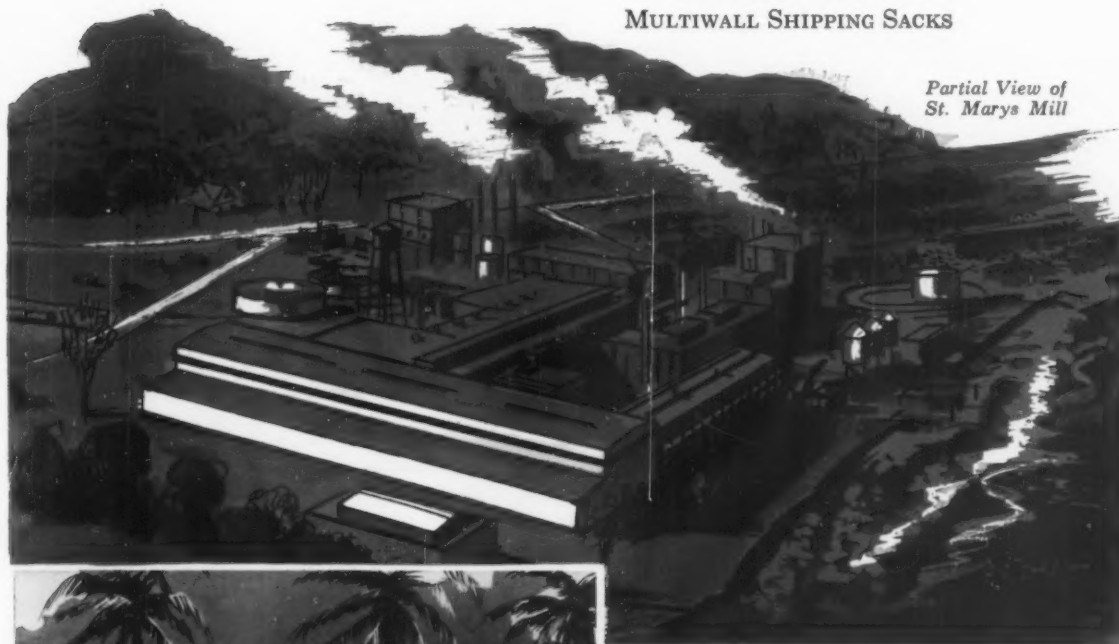
**GUMMED SEALING TAPE**  
regular and reinforced, in natural or colors, plain or printed

**STAY TAPE, VENEER TAPE**

**CELLUCORD® (KRAFTCORD®)**  
Cellulfiltercord

**GROCERY BAGS AND SACKS**

**MULTIWALL SHIPPING SACKS**



*Partial View of  
St. Marys Mill*



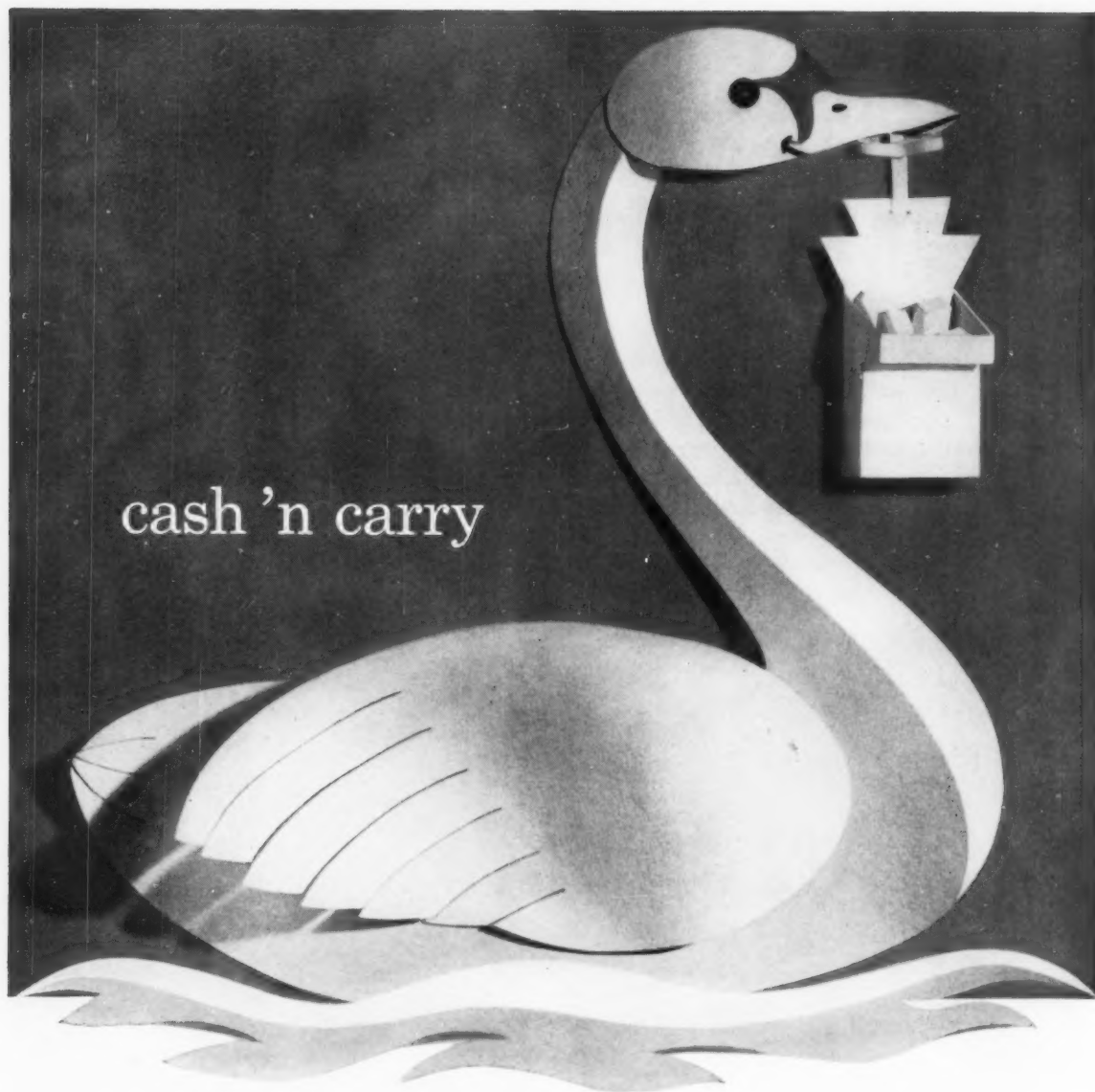
*New 300,000 sq. ft. addition to converting facilities at St. Marys, Ga., scheduled to go "on stream" in February '60.*

**GILMAN  
PAPER COMPANY**  
630 Fifth Avenue, New York 20  
Daily News Bldg., Chicago 6, Ill.

*Subsidiaries:*

Kraft Bag Corporation  
St. Marys Kraft Corporation  
Cellucord Corporation  
Paper Mills and Converting Plants at  
St. Marys, Ga. and Gilman, Vt.





cash 'n carry

## KRAFTSMAN WHITELINER

Uniquely qualified for highest quality corrugated containers to carry goods to market . . . as self-selling displays, too. Kraftsman Whiteliner is a bright, blue-white test liner of remarkable brilliance and smoothness—excellent for reproducing fine printing detail. Scuff resistance, tough-

ness and strength add to the versatility and economy of this outstanding display linerboard. For samples and more information, call or write: Kraft Division Sales, West Virginia Pulp and Paper Company, 230 Park Avenue, New York 17, New York.



**West Virginia  
Pulp and Paper**



MEET THE COMPLETE

## KRAFTSMAN family:

a full, high quality Containerboard line to meet every need and specification—with efficiency and economy.



Kraftsman Whiteline



Kraftsman Dura-Bend Liner



Kraftsman Dura-Corr



Kraftsman Superliner



Kraftsman Weather-Tite Liner

## Equipment & Materials [Continued]

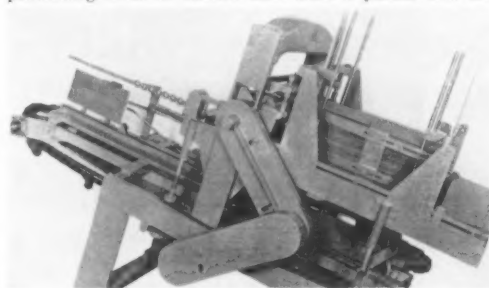
are closed by standard heat-sealing methods. Bags are available in three sizes: 6 by 6½ in., 6 by 9 in. and 6 by 12 in. According to the supplier, they are five times less costly than other containers used for pre-packaging hard-to-handle meat and seafood products. *The Dobeckmun Co., Div. The Dow Chemical Co., 3301 Monroe Ave., Cleveland 13.*

### Miniature photo-electric pickup units

Miniature electronic controls, which are reported to permit electronic-eye counting and controlling units to be used in processing, printing and machine controls in areas heretofore inaccessible, have been developed by Photomation. Over-all size of the 11/16-in.-diameter photo unit and light unit is 1 13/16 by 1 5/16 in. These units can be mounted on any convenient stationary support. They can be used to detect interruption of a light beam by a passing container, or they can be used to monitor, register, differentiate among surface qualities or establish motion limits of paper or plastic sag. *Photomation, Inc., Bergenfield, N.J.*

### Case-handling and overwrapping units

Two new packaging-machinery items are available from Crompton & Knowles. The Model CKCO (shown) is a mechanical or pneumatic case opener-former-positioner with discharge, for setting up corrugated shipping cartons, positioning them to receive cans from a packer and dis-



charging the filled case. Production rate is up to 40 cases per minute, says the company. The machine can handle knocked-down cartons in a dimension range of 22½ by 14½ in. to 29¾ by 27 in. Loaded with flat cartons, the machine opens the cartons and places them on their sides to receive up to 24 cans at a time. After filling, cartons right themselves and pass by conveyor to closing and sealing equipment. The supplier's other new machine is the Model CKDW4R film overwrapper for cookie stacks and other multiple units of baked goods. It is reported to operate at up to 80 packages per minute. After products are clamped into position for overwrapping, an elevator comes up to meet them and place them into an incoming U-shaped card. High pushers pick up the product and automatically overwrap and seal. *Crompton & Knowles Packaging Corp., Holyoke, Mass.*

### Wood-grain texture on plastic

"Frost Wood" is the name given by Dow Chemical to its newly developed decorated swirled texture for molded plastics. The distinctive texture, which resembles wood grain, is formed by special techniques in the molding of expandable beads of polystyrene. Decorative packaging is one of the fields in which the textured plastic is expected to find application. Such packages, the supplier notes, can be reused because of their beauty and utility. Technical data are offered by *The Dow Chemical Co., Midland, Mich.*

### Resin for pressure-sensitive adhesives

Now available from National Starch's Resin Div. is a vinyl acrylic copolymer solution for use in laminating or formulating pressure-sensitive adhesives. It is called Resyn 26-2404. According to the supplier, the tacky solution shows specific adhesion to such materials as cellulose acetate, polyester,



Now! Uniform heat  
for uniform packaging!



## New Honeywell **VERSA-TRAN**\*

Precisely controls  
temperatures to assure  
a perfect package every time!

Honeywell's new, low cost Versa-Tran is designed to be used in any packaging process where heat must be precisely and uniformly applied. Its low-mass sensing element reacts instantly to the slightest variation in temperature—assures the exact temperature for each packaging operation. You'll speed production, cut rejects, get a perfect package every time!

And this new temperature controller is always ready to go to work. Its unique transistor circuitry needs no warm-up period. It's more flexible, too, because it uses very small, low-voltage wiring.

Other Honeywell Versa-Trans are available to provide precise fill-level control for liquids, accurate humidity control for printing, and close pressure control where the product is weighed on a pressure-sensitive plate or enclosed in a pressurized can.

For details about the Honeywell Versa-Tran that will meet your specific packaging requirements, call your local Honeywell office. Or write Honeywell, Dept. MG-3-36, Minneapolis 8, Minn. In Canada, Honeywell Controls Ltd., Toronto 17, Canada.

\*Trademark

## Honeywell



First in Control

SINCE 1888

75 YEARS OF  
ENGINEERING THE FUTURE

See us in Sweet's 1960 Product Design File, Section 5b-Min

### Equipment & Materials [Continued]

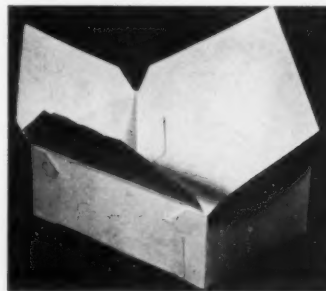
vinyl and foil. In addition to providing superior adhesion to such surfaces, says the company, the resin can be thinned easily with inexpensive solvents, provides excellent heat and light stability and is compatible with a variety of modifying resins. *National Starch & Chemical Corp., 750 Third Ave., New York 17.*

#### Lacquer for polystyrene

Suggested for use by fabricators of polystyrene packages is C. L. Rowe's new 101A lacquer. It can be applied by spray or dip methods to conventional or high-impact polystyrene. Among the advantages reported for the material are that it can be used over wet ink, has excellent non-crazing adhesion, high gloss and exceptional resistance to chemicals and solvents. The lacquer is available in clear, black and color formulations. *C. L. Rowe Corp., Rutherford, N.J.*

#### Frozen-food carton with 'funnel'

Packaging-line efficiencies and savings in carton costs are the advantages claimed by Container Corp. for its new "Funnel Pak" top-loading frozen-food carton. The funneling



effect of the carton's four top flaps (see photo) makes filling easier and reduces the incidence of product spillage, the supplier notes. The carton's structural design is reported to achieve a saving in paperboard with consequent cost economies. According to

the company, the new container's structural design eliminates top-flap overlapping of paperboard at the front and side walls. Only minor machinery modifications are required to adapt the carton to conventional top-loading frozen-food systems, says the supplier. *Container Corp. of America, 38 S. Dearborn St., Chicago 3.*

#### Filling thin-wall plastic bottles

A new attachment that grips the necks of thin-walled plastic containers to prevent crushing and inaccurate fills has been developed for liquid-filling machinery by MRM. The supplier reports that the device assures accurate fills during high-speed (up to 200 containers per minute) production without the need for complex and costly additional equipment. It will accommodate any size of thin-wall plastic container, including quart and gallon sizes. In operation, stainless-steel arms on the attachment encircle and gently grip the neck of the container. The steel arms and container neck alone bear the pressure of the filling spout's spring to activate product flow. No pressure is exerted on any other part of the container, so it reportedly cannot be distorted during filling. In conventional liquid-filling equipment, the supplier says, filling-spout spring pressure distorts large, thin-wall plastic containers and often results in inaccurate fill. The new attachment works on the scissors-grip principle. It is automatic and can be synchronized with the filling operation. Its use in no way reduces normal filling speeds, according to the company. *MRM Co., Inc., 191 Berry St., Brooklyn 11.*

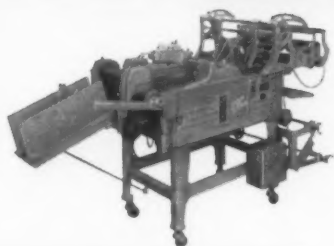
#### Electronic plastic-welding equipment

Theratron has developed new equipment designed for the electronic welding of window, blister or vacuum-formed packaging. The machine reportedly assures a tamperproof, dust-free weld. It is designed for application in the drug and cosmetic industries, and for the packaging of small parts of many different types. *Theratron Div., Wilcox & Gibbs, 214 W. 39 St., New York 18.*



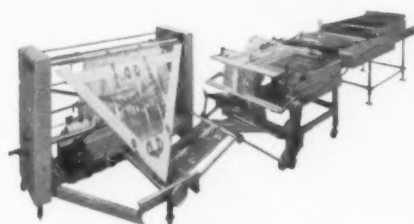
**High quality bag making  
..... trouble-free automatic packaging .....**

**See.... *Simplex* for a proven machine to do the job**



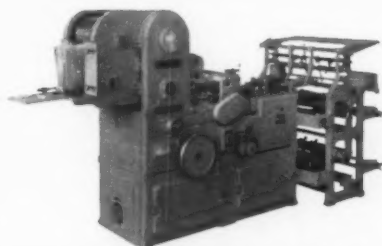
#### **VERSATILE MULTI-DUTY MACHINES**

Provide high quality heat seal cellophane bags, up to 12" wide by 20" long. A wide variety of machine attachments available. Write for bulletin SPM-3.



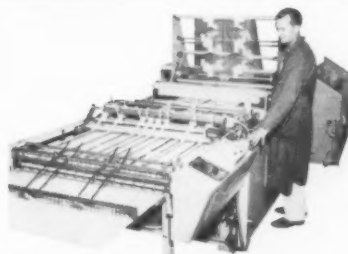
#### **SIDE WELD & CONVENTIONAL POLYETHYLENE BAG MACHINES**

produce bags of finest finish appearance; and with strongest seals. Write for side weld bulletin SPM-9 and conventional machine bulletin SPM-8R.



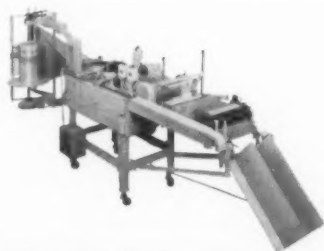
#### **HIGH SPEED CELLOPHANE BAG MACHINE**

Famous "300" provides heat and glue sift-tight bottom and corners; speeds up to 100,000 bags per shift. Lengths, 4" to 18"; widths, 2" to 12". Write for bulletin SPM-300.



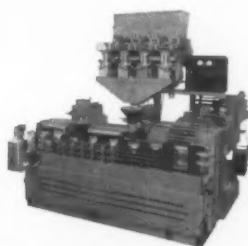
#### **NEW 40" WIDE SIDE WELD MACHINE**

Split draw roll operation—either one or two webs. Designed for rugged converter use. Bag sizes from 3" length x 5" width, to 40" length x 30" width. Write for bulletin SPM-210.



#### **AUTOMATIC POUCH-MAKING MACHINES**

For quality production with heat-sealing laminates for vacuum or for military packaging. A wide variety of attachments available. Write for bulletin SPM-4.



#### **FULLY AUTOMATIC PACKAGING**

Simplex-O-Matic combines bag making, weighing or measuring, filling, sealing and check weighing, in one continuous, automatic operation. Write for bulletin SOM-1.



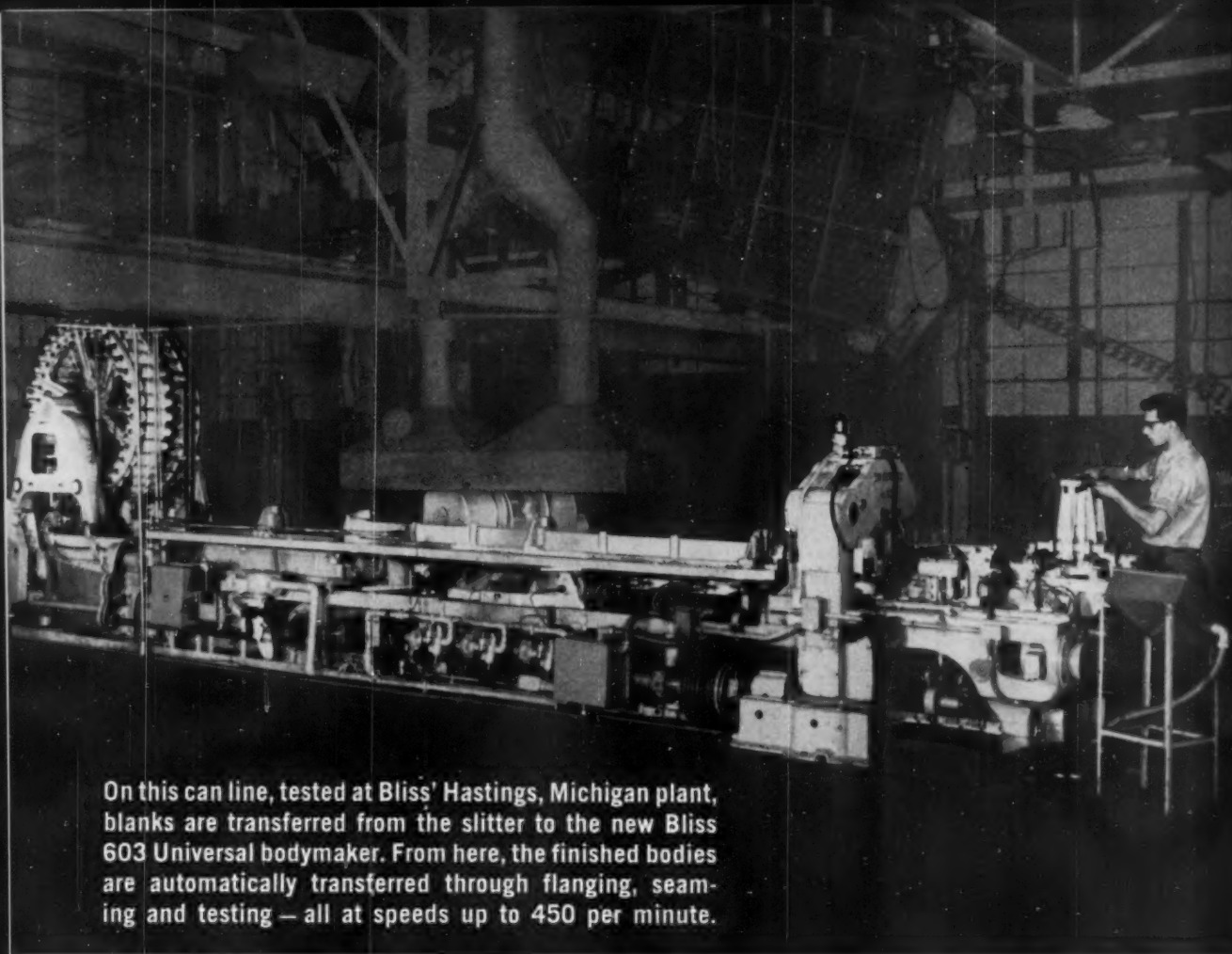
*Putting Ideas to Work*

**FOOD MACHINERY AND CHEMICAL CORPORATION  
FMC Packaging Machinery Division**

534 - 23rd AVENUE, OAKLAND 6, CALIFORNIA

Foreign Sales: FMC International Corp., P.O. Box 1178, San Jose, Calif., U.S.A.  
(Cable Address: FOODMACHIN)





On this can line, tested at Bliss' Hastings, Michigan plant, blanks are transferred from the slitter to the new Bliss 603 Universal bodymaker. From here, the finished bodies are automatically transferred through flanging, seaming and testing — all at speeds up to 450 per minute.

## **BLISS MAKES 2 MILLION CANS IN NOVEL TEST OF CAN LINE**

For a few weeks last fall, E. W. Bliss Company was in the can-making business. When Bliss finished building the first of six complete can lines, they thoroughly tested the line by producing 2,000,000 cans in their own plant at Hastings, Mich.

Almost completely automatic in operation, the line produced the finished, tested cans at speeds up to 450 per minute.

Key unit is the new Bliss 603 Universal Bodymaker, shown above. The 603 makes a wider assortment of can sizes than any

other bodymaker; can turn out bodies as large as 6-3/16" diameter and 5-9/16" high. The substitution of standard change parts enables it to make bodies 7-13/16" high! This remarkable versatility makes the 603 ideal for packers who use many different can sizes.

It will pay you to take a look at the new 603 and other equipment in the Bliss high-speed can line. To get complete information on these products, **just drop us a letter —we'll send our latest bulletins.**



**E. W. BLISS COMPANY • Canton, Ohio**

*BLISS is more than a name—it's a guarantee*

PRESSES • ROLLING MILLS • ROLLS • DIE SETS • CONTAINER MACHINERY • CONTRACT MFG.



# Always ready with packages when you have a Tick—



*Do changes in product specifications sometimes leave you without the proper packages? Get a Tickometer and imprint packages as you need them—easily, cheaply, with impressive reductions in package inventory, printing costs and waste.*

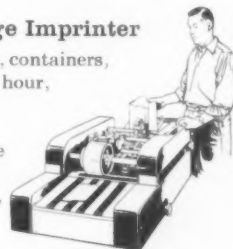
- With a Tickometer, you can imprint weight, size, grade, color, quantity, price, date or code—on wrappers, bags, inserts, envelopes, labels, small cartons—from 400 to 1,000 pieces a minute. Prints from type slugs, rubber mats, or electros; handles most weights and finishes of paper, and light board, in sizes as large as 15 by 15 inches. Feeds and stacks automatically, easy to set, can be operated by anyone.

- The Tickometer can be used to stamp, mark, cancel, sign, date and code—checks, coupons, cards, tickets, tags, sales slips, etc. It is also a precision counting machine, so accurate banks use it to count currency.

- The Tickometer can be leased or bought. Pitney-Bowes service is available from 304 points. Call the nearest Pitney-Bowes office for a demonstration. Or send coupon for free illustrated booklet and case studies.

## Model 4800 Package Imprinter

Imprints folding cartons, containers, bags, etc. up to 7,500 an hour, as needed—reducing inventories and waste. No tools required, can be operated by anybody. Ask for a demonstration, or send coupon.



**Pitney-Bowes**



**TICKOMETER**

**Imprinting & Counting Machine**

*Made by the originator of the postage meter . . .  
offices in 132 cities in U.S. and Canada.*

PITNEY-BOWES, INC.  
4832 Walnut Street  
Stamford, Conn.



Send free illustrated booklet on:

☐ Tickometer ☐ Package Imprinter

Name \_\_\_\_\_

Address \_\_\_\_\_





*The package **is***



PLASTIC  
TUBES

Bradley-Sun squeeze-to-use tubes are fabricated by an exclusive extrusion molding process using polyethylene as the base material. Transparent containers can be provided for gayly colored products. Opaque tubes can be furnished in a variety of pastels and attractive over-printing of all types is available in one to four colors. Complete internal and external linings make Bradley-Sun tubes adaptable to many food, drug, cosmetic, household, chemical and industrial products. Modernization and equipment recently introduced in the plastic division assure delivery . . . not only of initial orders but of back-up volume to meet your requirement, (as sales increase).



METAL  
TUBES



New manufacturing methods . . . new caps . . . new coatings and new thinking characterize the Bradley-Sun collapsible tube. Hundreds of leading manufacturers rely on Bradley-Sun metal tubes for quality, uniformity and sales appeal. With the most automated facilities in the collapsible tube field Bradley-Sun is capable of making more tubes *faster*, than anyone else in the industry.

A complete range of sizes, styles and designs can be furnished. We'll be happy to bring our extensive lining technology to focus on your problem, too!

ALUMINUM  
AEROSOLS



Bradley-Sun offered another merchandising first with the recent introduction of a seamless, *all-aluminum aerosol* that is competitively priced with seamless tinplate. This fashion-styled pressure container is lightweight, non-rusting and may be joyously decorated in up to four brilliant colors. Extensive aerosol technology is enhanced by our knowledge of internal coatings and bottom sealing. All commercial propellants may be used and shoulders may be varied both in design and angle. An unusual rim also permits a one-piece, flush overcap for the last word in low cost modernity.

*your product at the point-of-sale!*





# For Your Information

The challenge for expansion and improvement of the industry's volume and profit picture in the 1960s will be the theme of the 55th annual convention of the **Lithographers & Printers National Assn.**, to be held April 25-27 at Boca Raton, Fla. Also at the convention, LPNA will present certificates of award to winning entries in its 10th Anniversary Lithographic Awards Competition & Exhibit. The awards will be presented in a total of 51 categories, and will be based on technical excellence, effectiveness of art and design and also on functional value.

Lawrence H. Zahn has been chosen to represent the pharmaceutical industry as a member of the **Committee for Economic Development, Industry Finance Committee**. He is director of the purchasing and package development div. of **Ciba Pharmaceutical Products, Inc.** Organized in 1943, CED conducts research programs on economic problems.



Zahn

Since joining Ciba in 1944, Mr. Zahn has been active in many industry and government projects. He is v.p. and director of the **Packaging Institute** and is a member of the advisory committee of Michigan State's School of Packaging.

The seventh annual **Material Handling & Packaging Training Course**, sponsored by the **Industrial Management Center**, will be held at the Lake Placid Club, Lake Placid, N. Y., June 12-25. The course on packaging will cover all aspects of the field, including the organization and operation of a packaging program. For additional information, write: James R. Bright, Director, Industrial Management Center, 56R Robbins Rd., Lexington, Mass.

**Comet Industries** has prepared a 24-page bulletin which is designed to clarify the functions, characteristics and performance of vacuum-forming machines. Titled "Summary of Thermoforming Techniques," the booklet outlines the various methods of vacuum forming, including drape forming, vacuum forming into a cavity, billow forming, plug assist and other techniques. Each discussion is accompanied by one or more illustrations. Copies of the booklet are available, without charge, from Comet Industries, Franklin Park, Ill.

A session on convenience foods and packaging will be a feature of the forthcoming 14th annual meeting of the **Research & Development Associates, Food & Container Institute**. Topics of military-industry concern, including food and container research, will be

covered during the three-day program, April 19-21, which will be held at the Congress Hotel, Chicago.

A "Manual of Molded Plastic Food Containers" has been compiled by **Florsheim Mfg. Co.**, Chicago, maker of molded-plastic food containers. It contains data on the selection, purchasing and handling of such containers. Free copies of this publication are available from the company at 22 W. Monroe St., Chicago.

**Purdue University** is conducting a two-week **Industrial Packaging Short Course**, Mar. 21-April 1, at Lafayette, Ind. Experts from industry and members of the engineering faculty are scheduled to lecture on functional aspects of packaging. **Charles Zusi**, packaging consultant, is coordinating the event. Certificates of completion of the course are recognized in the U. S. and Canada, reports the university. For information, contact Mark E. Ocker, Division of Adult Education, Memorial Center, Lafayette, Ind.

**Aluminum Co. of America** has released the first issue of a new, semi-annual, hard-cover magazine, **Design Forecast**. According to Alcoa's chief industrial engineer, **Samuel L. Fahnestock**, who is also editor-in-chief, the publication is "by and about designers, and about design in general and aluminum in particular." With a four-color case binding, the initial issue runs 64 pages and carries many four-color illustrations. The new publication, which includes articles by designers and industry executives, is being distributed on a subscription basis at a rate of \$5 for two issues. It is available from the company at 1501 Alcoa Bldg., Pittsburgh 19.

Finishing work on an international glossary of plastics terms has been done by **Technical Committee 61 on Plastics**, a committee of the **International Organization for Standardization**.

The use, properties, design, handling and printing of aluminum foil cartonboard are covered in a 12-page booklet compiled by **Anaconda Aluminum Co.** Data include suggestions for effective utilization of foil cartonboard for packaging a variety of products. The company also offers a 20-page booklet on the subject of "Lithographic Printing on Aluminum Foil." Both items are available, free of charge, from Anaconda headquarters, located at 1430 S. 13 St., Louisville, Ky.

A 17-page, paperbound booklet, "Capital & Income Survey of the United States Pulp & Paper Industry," has been published by the **American Paper & Pulp**

**Assn.** The survey, covering the years 1939 through 1958, is compiled of data from the industry supplemented by information obtained from government agencies, including the **Bureau of Internal Revenue**. Copies are available without charge from the association at 122 E. 42 St., New York.

The polyethylene bag and its uses in frozen-food packaging was a major subject of discussion at the 16th annual meeting of **Western Frozen Food Processors Assn.**, held Feb. 8-10. Among the panel topics concerning the film were boil-in-the-bag applications and the recent trend toward the packaging of loose-frozen produce in polyethylene bags and pouches.

A 20-page brochure containing more than 100 case histories on the subject of cartoning and case packing is offered by **R. A. Jones & Co.** Titled "Cartoning & Case-Packing Ideas," the illustrated booklet tells how various products are cartoned economically on automatic and semi-automatic machinery. Copies are available, without charge, from the company, at P.O. Box 485, Cincinnati 1.

"Design Guide for New Paper Products" is the title of a 24-page illustrated brochure prepared by **Monsanto Chemi-**

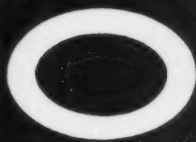
## Events

- Mar. 4-6—**Food Merchandiser's Institute**, Inaugural Conference and Exposition, Hotel LaSalle, Chicago.
- Mar. 6-10—**National Assn. of Frozen Food Packers**, 19th annual meeting, Conrad Hilton Hotel, Chicago.
- Mar. 8-9—**Packaging Assn. of Canada**, National Packaging Conference, King Edward Hotel, Toronto.
- Mar. 22-23—**Folding Paper Box Assn. of America**, annual meeting and competition, Ambassador Hotel, Los Angeles.
- Mar. 22-24—**Lithographic Technical Foundation**, annual meeting, Conrad Hilton Hotel, Chicago.
- Mar. 27-30—**National Paper Trade Assn.**, annual convention, Waldorf-Astoria Hotel, New York.
- April 4-7—**American Management Assn.**, 29th annual National Packaging Exposition, Convention Hall, Atlantic City, N.J.
- April 19-21—**Research & Development Associates, Food & Container Institute**, 14th annual meeting, Congress Hotel, Chicago.
- April 20-27—**Interpack**, International Packaging Exhibition & Display of Confectionery Machinery, Dusseldorf, West Germany.
- April 25-27—**Lithographers & Printers National Assn.**, 55th annual convention, Boca Raton Hotel & Club, Boca Raton, Fla.



Oneida  
puts  
"appeal"  
in *flexible*  
packaging

Unveil your product in a distinctive and richly printed package, and you've discovered the secret of stimulated sales. Oneida, of course, can take the hardest part of the job off your hands. We have a team of top design men who will create the flexible package that's right for your product, and the facilities of four modern plants equipped with the latest 6-color flexographic, letterpress and rotogravure presses. An Oneida representative will be glad to call at your convenience.



**neida** PAPER PRODUCTS, INC.

10 Clifton Blvd., Clifton, N. J.

Baltimore, Md. • Chicago, Ill. • Los Angeles, Cal. • Sales Offices in All Principal Cities

CONVERTERS AND COLOR PRINTERS OF QUALITY PACKAGING: Gum, Cellophane, Paper, Plastic, Foil, and Laminates

whatever  
your product . . .



*flexible* packaging  
by Oneida



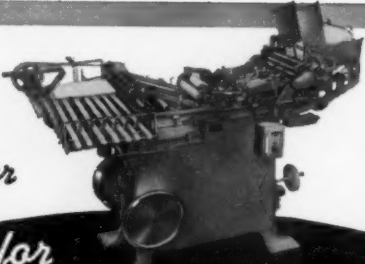
will surround it

with **SELL!**





7000  
per hour



**for**  
**IMPRINTING**  
**CODING**

**The MULTIPRESS**

MARKINGS OF PRINTING-PRESS-QUALITY ON

FOLDED CARTONS • LABELS • MATERIALS •  
PAPER PRODUCTS • BAGS • ADVERTISING  
LITERATURE • FLAT CONTAINERS

IMPRINTING

LOT NUMBERS • DATES • FLAVORS • SIZES •  
PRICES • CONTENTS • COLORS • STYLES • CATALOG  
NUMBERS • BLOCKOUTS • DEALER IMPRINTING

CONSULT VERNER ON IMPRINTING PROBLEMS

**B. VERNER & CO., INC.**  
52 DUANE STREET, NEW YORK 7, N. Y. BA 7-1466-7

Visit us at Booth #146—National Packaging Show—Atlantic City—April 4th-7th

**A LOW COST—EASY TO OPERATE**  
**Drape and Vacuum Forming Machine**



**Comet**  
**METEOR**  
**AUTOMATIC**

Widely used in Industry for—  
**VISUAL PACKAGING**

- Spare Parts
- Protective Packaging
- Governmental Packaging

Some of the Comet Meteor Users:

General Electric Co.  
Westinghouse Electric Corp.  
Sundstrand Aviation, div. of Sundstrand Corp.  
Caterpillar Tractor Co.

Send for bulletin MP-3.

See the full line of Comet Plastic  
Drape and Vacuum Forming Machines—  
BOOTH 1223.

**COMET INDUSTRIES • FRANKLIN PARK, ILL., U.S.A.**  
PROGRESS IN PLASTICS

## F.Y.I. [Continued]

cal Co. The outside booklet suggests 18 new applications for hard-sized paper and paperboard, including many functional convenience packages. Copies are available from Monsanto, 800 N. Lindbergh Blvd., St. Louis 66.

The 45th annual meeting of the Technical Assn. of the Pulp & Paper Industry was held at the Hotel Commodore, New York, Feb. 22-25. Some 29 technical sessions, 60 committee meetings and the association's annual business meeting highlighted the four-day program.

A revised manual, "Technical Aspects of Cans and the Canning of Carbonated Beverages," has been made available by American Can Co. The seven-page, paperbound booklet contains data on carbonated-beverage packaging, including container strength and shelf life. Copies may be obtained without cost from the company, at 100 Park Ave., New York.

Bert H. Cooper has been re-elected to a one-year term as chairman of the advisory committee for paper technology at Western Michigan University, Kalamazoo. Mr. Cooper recently retired as v.p. of Kalamazoo Paper Co. William A. Kirkpatrick, pres. of Kalamazoo Paper, has been elected vice chairman of the committee.

Winners of the 1960 Box Competition of the Set-Up Box Industry, sponsored by the National Paper Box Mfrs. Assn., will be announced during the group's annual meeting in New Orleans, April 27-May 1. Judging of the entries was conducted last month in Philadelphia. The panel of judges included: Henry Aemisseger, formerly of G. A. Bisler Co.; Howard Berger, Smith, Kline & French; F. William Koehl, Jr., The William Koehl Co.; Frank P. Coons, Johnson & Johnson; William Longyear, Pratt Institute; William V. Murphy, R. H. Macy; Maxwell B. Rogers, Avon Products, and Richard B. Schlesinger, Carson Pirie Scott.

Election of officers for 1960 has been announced by the Waxed Paper Merchandising Council. James V. Melton of Pollock Paper Co. has been re-elected pres. and board chairman. Harold E. Pierce of Marathon also has been re-elected to the post of v.p. Elected to three-year terms on WPMC's board of directors were: Carl E. Doane, Nashua Corp.; Frank V. Snyder, Moore & Munger, and Harold E. Pierce. Appointed members of the executive committee were: R. L. Appling, Western Waxide; R. D. Halford, Fabicon Products, and A. Southon, The KVP Co.

The Pulp & Paper Prepackaging Assn. is distributing a 32-page, illustrated booklet entitled, "Self-Service Meat—Is It For You?" The booklet gives a history of the trend towards self-service merchandising of meats and shows that adapting to the trend is a matter of sur-



# New! SPEEDY AUTO BAG SEALERS Amazing!

*eliminates*  
**Saves 1 Labor!**



"One operator bags. The Speedy Auto Bag Sealer Automatically bead-seals, cuts-off excess of bag, blows excess into receptacle."

Pick up your literature at booth #1001, or write us for it.  
DEALER ENQUIRIES INVITED.

**Amazing Speedy Bag Packager** packages products in almost every type of bag.

1.—The Speedy Auto Bag Sealer can be operated automatically, or manually. It is adjustable in its size range of bags sealed. Eliminates up to two operators in the bagging/sealing cycle. Finished products can be emptied into box, or carried away on conveyor. Sturdily-engineered and compact, saves floor space.  
2.—Speedy Bag Packagers are used in 33 countries. Known as the fastest bagging machine, it generates a controlled stream of baffled air that speedily opens bags and packages hundreds of items.

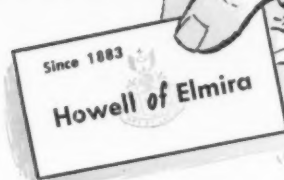
Works wonders with polyethylene. Portable, easy to operate, no special training necessary, minimum maintenance. Handles items of every variety, bulky, flat merchandise or food.

## ERRICH INTERNATIONAL CORPORATION

Packaging  
Division

35 W. 36th Street, New York 18, N. Y. / Wisconsin 7-7330

**For  
QUALITY  
PACKAGES**



CONSULT  
US ON  
YOUR  
PACKAGING  
PROBLEMS

### LABELS • BOXES • DISPLAYS

Yes, for over 70 years Howell of Elmira has been manufacturing "Quality Packaging."

Our skilled craftsmen are available to help solve your particular packaging problem from start to finish. We will welcome the opportunity to discuss this with you.

### F. M. HOWELL & CO.

79-95 PENNSYLVANIA AVENUE, ELMIRA, N. Y.

## ENGINEERING

**for the Converting  
and Packaging Industry**

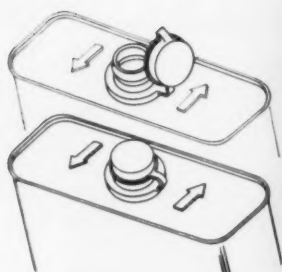
- ANALYSIS OF PRESENT OPERATIONS
- REPORTS AND RECOMMENDATIONS
- PROCESS STUDIES
- PLANS AND SPECIFICATIONS
  - plant rearrangements
  - plant extensions
  - new plants

### CHAS. T. MAIN, INC.

80 FEDERAL ST., BOSTON, MASSACHUSETTS

129 WEST TRADE ST., CHARLOTTE, NORTH CAROLINA

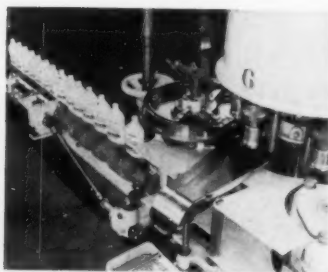




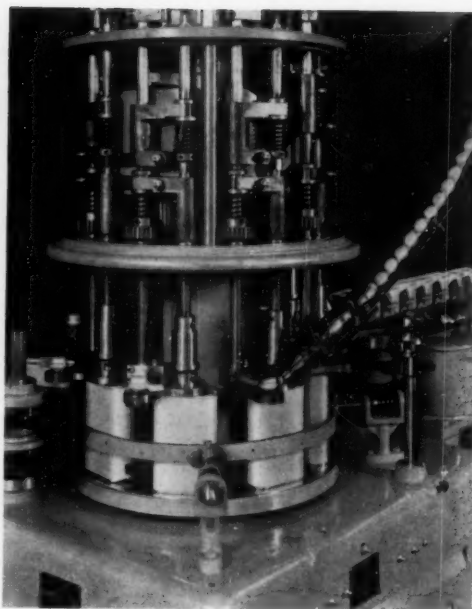
## HERE'S BEST WAY TO APPLY THE NEW PLASTIC "FLIP CAPS"

Plastic "Flip Caps" give the new 1960 look to both "F" and "I" type cans. Consolidated has perfected the dependable, fully automatic method for applying these new plastic closures which replace the soldered screw-neck nozzles which have been in use for over 25 years.

The new D8-FS Consolidated Capper is available in models with 2 to 8 spindles and with capacities from 40 to 250 containers per minute. The plastic fittings with *captive plastic caps* are fed from a hopper and inserted by straight down pressure rather than rotary screw motion previously used on metal screw caps. Cost-consuming soldering is eliminated by the neckless can — your packages are up-dated for increased consumer appeal. Consumers prefer this type cap because of convenience of handling. Both quart and pint sizes can be handled with equal ease.



Consolidated D6-F Capper in use at S. C. Johnson & Co. applying plastic screw-type closures with captive caps to plastic containers. The new design, adjustable tension grips hold plastic containers firmly without collapsing them. Capacity 120 containers per minute.



*For complete information about this most modern equipment for applying these most modern caps, write today.*

## CONSOLIDATED PACKAGING MACHINERY CORP.

A Subsidiary of International Paper Company  
1400 West Avenue, Buffalo 13, N. Y.

### F.Y.I. [Continued]

vival in present-day merchandising. Copies are available, without charge, from the association, at 122 E. 42 St., New York 17.

The New York Section of the American Chemical Society will hold its first exposition at the Statler Hilton, New York, Sept. 13-15. Called "Chemical Exposition U.S.A. 1960," the show will run concurrently with the 138th national meeting of the ACS, which will convene at the same hotel.

Preparations are under way for the second international plastics exhibition, "macroPlastic," which will be held at Utrecht, Holland, Oct. 19-26. Plastics Research Institute T.N.O. is sponsor of the show. Further details may be obtained from Internationale Kunststoffenbeurs, Tesselschadestraat 5, Amsterdam, Holland.

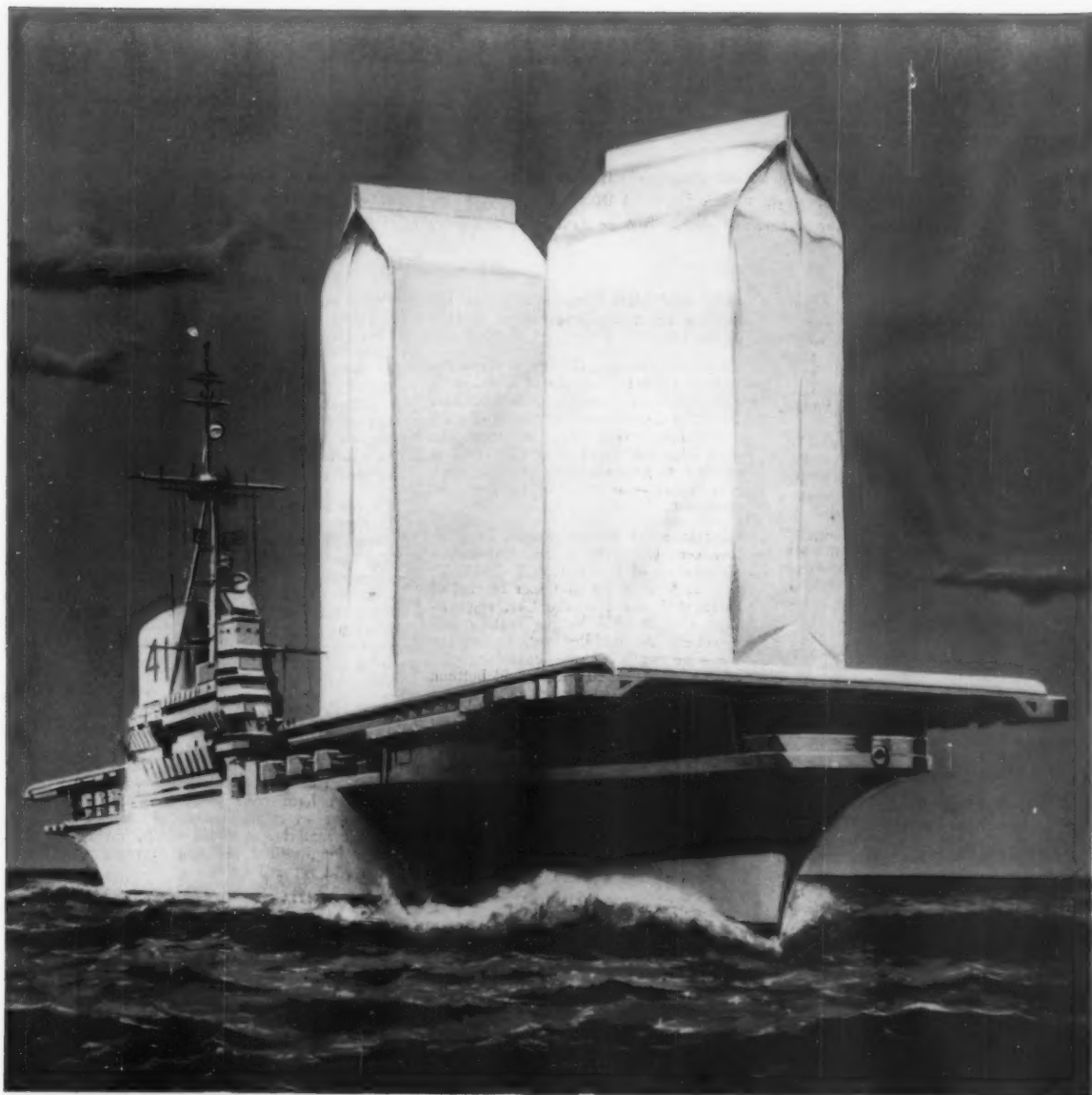
The Society of Packaging & Handling Engineers is now accepting entries in its 1960 industrial packaging competition. Open to all companies who wish to enter, the competition features awards in eight categories of industrial packaging: solid or corrugated fibre boxes, nailed wood boxes and crates, wire-bound boxes and crates, cleated panel boxes, general, export packages, military packages and materials handling. The competition is being handled by SPHE's Southern California Chapter. Entries will be displayed and winners announced at the **Materials Handling and Packaging Show**, to be held in Los Angeles, May 11-13. Deadline for submission of entries is May 8. Application forms can be obtained from the Competition Chairman, SPHE, P.O. Box 22082, Los Angeles 22.

M. A. Burnston has been appointed technical assistant on the headquarters staff of the Technical Assn. of the Pulp & Paper Industry. Mr. Burnston will work with TAPPI technical associates in the development, execution and guidance of divisional and committee activities, including the preparation of technical material.

"Package Buying and Print" is the theme of a conference planned for May 23-25 by the British Institute of Packaging. Speakers from both sides of the Atlantic will be featured during the meeting, which will be held at Eastbourne, England.

*Automating The Manufacturing Process*, by George F. Hawley, offers an explanation of the technique of contracting for automation projects at minimum financial risk, solutions to common manufacturing problems and a look at the engineering aspects. The 147-page, hard-cover book is especially concerned with processes involving feeding, inspecting, counting and packaging. Copies, at \$4.95, can be obtained from the publisher, Reinhold Technical Book Dept., 430 Park Ave., New York 22.





# **NIBROC<sup>®</sup> PRINT-PAK**

## **IS THE NEW NAME OF THE "CARRIER"**

### **...FOR PRODUCTS IN A HURRY**

It was only natural for many other products to be attracted to the award-winning Nibroc White "coffee bag." Therefore, a more encompassing name was needed. Nibroc PRINT-PAK was chosen because it is so expressive of the many qualities of this whiter, brighter flexible packaging. It handles superbly on forming, filling, and closing machinery... and can be printed at high speed by letterpress, flex-o-graph, offset, or gravure.

Whether it is coffee, cookies, dog food, briquets, or

fertilizer—Nibroc PRINT-PAK can carry your product most attractively, safely, and economically. Write for samples and complete information to Dept. DR-3.

*Another Quality Product of*

**BROWN  COMPANY**

*General Sales Offices:* 150 Causeway Street, Boston 14, Mass.  
*Mills:* Berlin and Gorham, N. H.



# U. S. Patents Digest

This digest includes each month the more important patents of interest to packagers. Copies of patents are available from the U. S. Patent Office, Washington, D. C., at 25 cents each in currency, money order or certified check. Postage stamps are not accepted. Edited by H. A. Levey.

**Slide-Top Dispenser Carton for Cigarettes and Other Articles**, Douglas R. Engblom, Marshall, Mich. U.S. 2,902,910, Sept. 1. A slide-top carton comprising a bottom, opposed side walls and front and rear walls rising from said bottom and of uniform height.

**Carrying Device for Containers**, Edward O. Then (to American Can Co., New York, a corporation of New Jersey). U.S. 2,914,826, Dec. 1. An endless rectangular tie band for securing together a pair of juxtaposed rectangular containers as a unitary carrying package, comprising an elongated strip of flexible sheet material for surrounding said containers to hold the same in contiguous contacting relation.

**Apparatus for Wrapper-End Closure**, Herbert Rumsey, Jr. (to W. R. Grace & Co., Cambridge, Mass., a corporation of Connecticut). U.S. 2,914,898, Dec. 1. An apparatus for applying heat to an end of an article wrapper, including in combination a mounting and a heating block pivoting on said mounting.

**End-Carton Filler**, Leonard McGihon (to King-O-Matic Equipment Corp., San Francisco, a corporation of California). U.S. 2,914,899, Dec. 1. Carton-filling apparatus comprising: a conveyor for progressing an open carton along a path and a pair of single-file container means for supplying a single file of containers on each side of said conveyor substantially parallel to the direction of movement of said conveyor.

**Can-Body-Making Machine**, Nelson Geertsen (to American Can Co., New York, a corporation of New Jersey). U.S. 2,915,028, Dec. 1. In a machine for making can bodies, the combination of an elongated support for a partially formed can body having separated inner and outer side seam hooks and feeding means disposed adjacent said support for advancing a can body therealong to a seam-assembly station.

**Machine for Assembling and Securing Ring Gaskets in Closure Caps**, John Hohl and Olav Bjering (to Owens-Illinois Glass Co., Toledo, a corporation of Ohio). U.S. 2,915,029, Dec. 1. A machine for assembling flanged caps and ring gaskets which comprises a horizontal cap plate formed with cap-receiving pockets in its upper face, said plate being mounted for rotation about a vertical axis.

**Self-Contouring Bags**, David J. McKay, Jr. and Edwin N. Kimmel (to Central States Paper & Bag Co., St. Louis, a corporation of Missouri). U.S. 2,915,098, Dec. 1. A self-contouring bag comprising a flexible tube having one transverse end open and being folded lengthwise in the provision of a flat multiple-ply

body, said plies forming a gusset extending along one longitudinal margin of the body.

**Container Closure**, George R. Ryan (to Abbott Laboratories, North Chicago, a corporation of Illinois). U.S. 2,915,211, Dec. 1. A container-closure assembly for a container having thread means on the neck adjacent the open end thereof, an annular ridge about the neck between said thread means and the body of said container.

**Container for Frozen Foods**, Dean E. Rueckert (to Swift & Co., Chicago, a corporation of Illinois). U.S. 2,915,235, Dec. 1. A tripartite container formed of corrugated board or the like, comprising: a collapsible bottom section and a collapsible middle section forming the side walls of the container and adapted to be fitted within said bottom.

**Carton-Feed Mechanism**, Leonard McGihon (to King-O-Matic Equipment Corp., San Francisco, a corporation of California). U.S. 2,915,309, Dec. 1. In a carton-erecting and closing machine, a feed mechanism including a hopper for cartons and reciprocity means for ejecting the cartons one-by-one.

**Container-Cleaning Machine**, James P. Whelan (to Pneumatic Scale Corp., Quincy, Mass., a corporation of Massachusetts). U.S. 2,915,773, Dec. 8. Container-cleaning apparatus comprising means for supporting and continuously conveying successive, spaced, containers in inverted position.

**Container-Sealing Apparatus**, Harry E. Stover (to Anchor Hocking Glass Corp., Lancaster, O., a corporation of Delaware). U.S. 2,915,862, Dec. 8. In a sealing machine, the combination of a rotary sealing mechanism, a conveyor and a mixer to mix a predetermined amount of air with steam, said sealing mechanism comprising a vertical shaft.

**Product-Settling Means for Draw-Type Wrapping Machine**, John S. Bartlo (to Lynch Corp., Anderson, Ind., a corporation of Indiana). U.S. 2,915,866, Dec. 8. In combination with a sealing die of a draw-type wrapping machine, the improvement of product-settling means, said product-settling means comprising a contact member carried by said sealing die and normally disposed in spaced relation forwardly and at the level of the sealing face.

**Wrapping Machine**, Anton Richard Frank and William H. Giles (to Van Buren Machine Corp., Brooklyn, a corporation of New York). U.S. 2,915,867, Dec. 8. In a wrapping machine, means for folding a wrapper sheet around an article to be wrapped, with parallel edge portions of the sheet disposed in overlapping relation.

**Four-Flap Case Opener**, Bruce Gray Copping (to Akron, Inc., Cuyahoga Falls, O., a corporation of Ohio). U.S. 2,915,868, Dec. 8. In a flap-opening apparatus for corrugated boxes, cases or the like, means to support the processed cases, means to open the side and trailing end flaps of the cases and means to engage the side flaps of the cases and to control the movement of the cases on said support means.

**Device for Simultaneously Cutting the Corners of a Box to Provide Closure Flaps**, Theodore J. Gross (to Union Bag-Camp Paper Corp., New York, a corporation of Virginia). U.S. 2,915,932, Dec. 8. A device for cutting each of the connected corners of a half of a box whereby the cutting of the corners converts each half of the box into a separate container, with closure flaps comprising a base.

**Packaging Material**, Arthur P. Klasing and William J. Rice (to Central States Paper & Bag Co., St. Louis, a corporation of Missouri). U.S. 2,916,053, Dec. 8. As an article of manufacture, a tube open at both ends and consisting of two flat overlying sheets of thermoplastic material of equal width, having their longitudinal margins in registration and secured together.

**Combination Display Package and Container**, Frank E. McKay (to Farrington Mfg. Co., Needham Heights, Mass., a corporation of Massachusetts). U.S. 2,916,140, Dec. 8. A combination display package and container comprising two hollow opposed shells, with a hinge connecting said shells for permitting opening and closing hinging motion of the shells.

**Screw Cap and Sealed Package**, Daniel D. Acton (to Anchor Hocking Glass Corp., Lancaster, O., a corporation of Delaware). U.S. 2,916,175, Dec. 8. A sealed package comprising a closure cap having a cover portion and a depending skirt, screw lugs formed from the lower edge of the skirt and a sealing element within the closure for engaging the rim of the container to form a hermetic seal.

**Combination Drip Protector and Pouring Spout for Cans**, Arthur R. Livingston, Omaha. U.S. 2,916,192, Dec. 8. A pouring spout and drip protector for containers having friction grooves in upper open ends thereof for retaining covers thereon, comprising a substantially circular flat sheet of material having a centrally positioned opening.

**Box**, Joseph Kramer and Glenn E. Stuble (to The Diamond Gardner Corp., Middletown, O., a corporation of Delaware). U.S. 2,916,196, Dec. 8. A carrying-handle construction formed as an integral part of a box erected from a



on your mark...  
get **RED-E-STIK**  
...go!

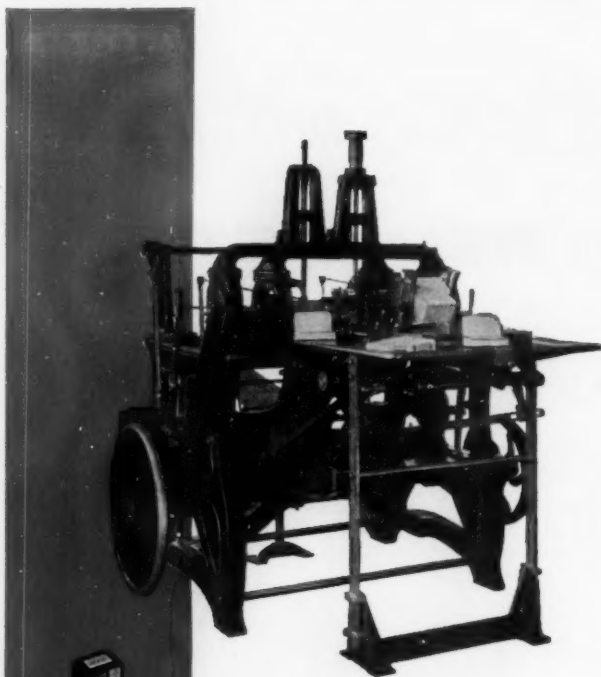


YOU CAN'T LOSE WITH RED-E-STIK, the pressure-sensitive labels that out perform them all. Your toughest packaging labeling problems are easy for Ever Ready's RED-E-STIK . . . they save you time and money with cleaner, quicker application . . . no wetting, no water, heat or glue needed . . . they stick to any smooth surface—plastics, paper, film, glass, metal, wood and other difficult surfaces. They sell and promote from the moment they're pressed into service. You can be sure when you buy RED-E-STIK! We are in our 49th year with 60,000 satisfied customers and a volume of 30,000,000 labels per day. This means the kind of equipment and know-how that assures you top quality at "quantity" prices. Write for our idea kit!

**EVER READY LABEL**  
CORPORATION  
357 Cortlandt Street • Belleville 9, N. J.







STANDARD BRIGHTWOOD

## "Versatility" is the word

... for the Brightwood Box Machine.

If you have one box size or 100 sizes, you can make them profitably on the Brightwood. Well squared, perfectly glued boxes are formed in one operation from flat printed blanks — one-piece hinged cover, two-piece telescope or lid, trays, tapered cartons, etc. — for a multitude of uses — screws, hardware, cigarettes, bakery goods, candy, cheese, playing cards, wax paper, etc. Write **US** today and get the facts.



## U. S. AUTOMATIC BOX MACHINERY CO., INC.

122 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.  
Branch Offices: New York • Chicago • Springfield, Missouri  
James C. Hale Co., Los Angeles, San Francisco • R. S. Gold, Toronto

## Patents [Continued]

blank form, comprising first and second box-wall panels connected along a common fold line for folding said second panel into underlying relation with said first panel.

**Sanitary Container-Opening Device**, Frederick C. Basselt (to American Can Co., New York, a corporation of New Jersey). U.S. 2,916,818, Dec. 15. A sanitary device for opening a container holding a product, comprising in combination a sheath having a substantially vertical tubular cavity formed therein.

**Method of Opening and Resealing a Carton**, Clarence F. Klein (to The Lord Baltimore Press, Baltimore, a corporation of Maryland). U.S. 2,916,859, Dec. 15. In the method of stamping a plurality of packages in a carton, the steps which comprise enclosing a stack of said packages in a carton having wall means including a panel element overlapping a flap element.

**Packaging Apparatus**, William E. Meissner (to American Viscose Corp., Philadelphia, a corporation of Delaware). U.S. 2,916,864, Dec. 15. A continuous packaging apparatus including means for forming a continuous casing from a web of sheet material and means for delivering material to be packaged into the casing.

**Package-Sealing Means**, Andrew W. Anderson (to Scandia Packaging Machinery Co., North Arlington, N.J., a corporation of New Jersey). U.S. 2,916,865, Dec. 15. In a wrapping and sealing machine, a heater bar engageable with lapped ends of a wrapper around an article for sealing said ends.

**Unit-Type Chemical-Freezing Package**, Albert A. Robbins (to Kwik-Kold of America, a corporation of Nevada). U.S. 2,916,886, Dec. 15. A chemical-freezing package comprising a rectangular envelope formed of a thin flexible plastic material, the peripheral edges of said envelope being sealed to prevent leakage of material.


**Mechanism for Feeding and Setting up Collapsed Cartons**, Frederick W. Kucklinsky and Arthur D. Farnow (to Container Equipment Corp., Bloomfield, N.J., a corporation of New Jersey). U.S. 2,916,974, Dec. 15. In a machine having a trackway over which flat collapsed cartons are successively moved subject to erecting, opening and filling, conveyor means to advance said cartons along the trackway.

**Compartmented Package**, Abraham B. Kehr (to Kehr Products Co., Philadelphia, a corporation of Pennsylvania). U.S. 2,917,164, Dec. 15. A package comprising a bag having a pouch and a removable article within said pouch, said bag comprising a substantially flat back member integral with a substantially flat front member.

**Four-Cell Compartmented Carton**, Homer W. Forrer (to Mead Packaging, Inc., Atlanta, a corporation of Ohio). U.S. 2,917,202, Dec. 15. A compartmented carton of the type adapted for carrying bottles and similar containers.

**Combination Carton and Cooking Receptacle**, Reynolds Guyer (to Waldorf Paper Products Co., St. Paul, a





# R·C·

## Metal-End Telescope Cans

*now cost less than ever!*

### *Good News for Quantity Users*

If you use large quantities of telescope cans, here is important dollar-saving news for you! Through new manufacturing techniques, R. C. Can is now able to bring you a brand-new price schedule. Here are the R. C. Metal-End Telescope Can specifications:

- Any size from  $\frac{3}{8}$ " to  $6\frac{5}{8}$ " diameters
- Any length to 32"
- Spiral wound with metal ends
- Can be telescoped (divided) at any point
- Wide variety of greaseproof or moistureproof wrappings and linings.
- Spiral-wound labels can be applied with perfect label registration.

*...and Don't Forget These Other Low-Cost R. C. Telescope Cans...*

- Cuff End    • Full Telescope

# R·C·

## CAN COMPANY



*Write Your Nearest R. C. Factory For Further Information and Prices.*

**MAIN OFFICE & FACTORY:** 9438 PAGE AVE., ST. LOUIS 14, MO. • **FACTORIES AT:** ARLINGTON, TEXAS; RITTMAN, OHIO; TURNER, KANSAS; HAWTHORNE, CALIF.; MILWAUKEE, WISC. Atlanta 6, Ga.—L. C. Morris Co., P. O. Box 8042 Station F., 1156 Dalon Drive, N. W. • Carnegie, Pa.—Allied Can & Container Co., 9 Sandsburg Ave. • Chicago 51, Ill.—Joe Rovin, R. C. Can Co., 4860 W. Chicago Ave. • Cincinnati 2, Ohio—Harris Containers, A. J. Harris, 307 E. Fourth St.—Room 426 • Hawthorne, Calif.—R. C. Can Company, 12530 Yukon • Indianapolis 20, Ind.—John C. Heim, 1500 E. 77th St. (Mail Address P. O. Box 6043) • Los Angeles 15, Calif.—Can Supply Co., 1006 W. Washington Blvd. • Memphis 3, Tenn.—S. W. Scott & Son, 608 McCall Bldg. • Milwaukee, Wisc.—National Paper, Can & Tube Co., 401 S. 7th Lane • Minneapolis 1, Minn.—W. L. Bennett, 126 S. Third St. • New Orleans 12, La.—C. E. Dobson, 1003 Carondelet Bldg. • New York City, N. Y.—R. C. Can Co., 225 W. 34th St. • Orlando, Fla.—Palmer Supplies Co., of Florida, Palmer Bldg., 209-211 E. Robinson • St. Petersburg, Fla.—J. H. Mackensen, Bay Pines Trailer Park, 10005 Bay Pines Blvd. • San Antonio, Texas—Larkin C. Smith, Jr., 614 West Kingshighway.





**CRESCENT**  
welcomes you to  
its Suite at the  
Ritz-Carlton Hotel  
during the  
Packaging Show  
in Atlantic City  
April 4-7

Get an eyeful of the Crescent line—K.O. Flex, the only alcohol-base ink for K films that prints without over-lacquer, for gravure as well as flexography. Learn about all the trouble-free Crescent packaging inks . . . about Crescent Spectrum Service that makes color matching fast and easy . . . many new developments that will improve your operations and help increase your profits.



**CRESCENT INK & COLOR COMPANY**  
464 North 5th St., Phila. 23 • 3901 West Rohr Ave., Milwaukee 9 • 1040 Grant St., S.E., Atlanta 15 • **KELCO DIVISION**: 716 Sidney St., St. Louis 4, Mo.

**Look to Crescent for Ink Leadership**  
Inks for Letterpress • Lithography • Flexography • Rotogravure

## Patents [Continued]

corporation of Minnesota). U.S. 2,917,218, Dec. 15. A two-section carton, said sections being identical and each section including a base panel, side panels hingedly connected to two opposed side walls of said base panel and end-wall panels foldably connected to the remaining edges of said base panel.

Container, Irving Schimel (to Owens-Illinois Glass Co., Toledo, a corporation of Ohio). U.S. 2,917,219, Dec. 15. In combination, a container and a cover telescopic thereover, said container having bottom, side and end walls.

Carrier for Bottles and the Like, Raymond N. Bostock (to P. Ballantine & Sons, Newark, a corporation of New Jersey). U.S. 2,917,220, Dec. 15. In a carrier for bottles and the like, a hollow first unit made from a sheet of paper-board and comprising a bottom wall, a pair of spaced parallel side walls and a pair of spaced parallel end walls.

Multi-Purpose Container, Harold L. Risdon (to The Pillsbury Co., Minneapolis, a corporation of Delaware). U.S. 2,917,221, Dec. 15. An openable container comprising an integral bottom and multi-sided wall structure constructed of stiff but bendable sheet material and defining a material-storing area and a multiplicity of corners.

Packaging Machine, Charles C. Clapp (to the Weyerhaeuser Co., Tacoma, Wash., a corporation of Washington). U.S. 2,917,876, Dec. 22. A machine for wrapping an elongated article, comprising means for applying a glue line longitudinally along one face of an elongated wrapper blank and means for depositing an article longitudinally on said glue line.

Method of and Apparatus for Packaging Food Products, John Hohl (to Owens-Illinois Glass Co., Toledo, a corporation of Ohio). U.S. 2,917,880, Dec. 22. Apparatus for closing containers for food products and the like, comprising a horizontal conveyor for supporting open, product-filled jars in normal upright positions with a head space filled with an inert gas.

Apparatus for Loading Cartons, John F. Curran (to Carton Associates, Inc., Louisville, Ky., a corporation of Delaware). U.S. 2,918,765, Dec. 29. Apparatus for loading an even number of containers into an open-ended sleeve carton, the interior width of which is less than twice the diameter of one of said containers.

High-Speed Wrapping Machine, Leo R. Bell and George Panuline (to American Machine & Foundry Co., New York, a corporation of New Jersey). U.S. 2,918,772, Dec. 29. A high-speed article-wrapping machine including an infeed mechanism.

Container Case-Feeding and Opening Means, Robert F. Krupp and Jan K. Wagner (to Gerber Products Co., Fremont, Mich., a corporation of Michigan). U.S. 2,918,773, Dec. 29. In a case-opener machine, a frame, conveyor means for advancing a case longitudinally of said frame, means for opening the outer end flaps of said case and means for unfolding outwardly an inner side flap of said case.



## ...for Greater Savings, More Sales Appeal

The Poly Grom process punches, reinforces and seals the hole—all in one operation. This remarkable new process reduces packaging costs, speeds delivery of your job and offers greater protection for your product and package. Now, the expense of metal eyelets and the machines, labor and space necessary to insert them is completely eliminated. You receive the bags with the Poly Grom holes already formed from the actual package material. Holes are stronger than the package and produce a sanitary dirt and dust free tight-edge seal. Packages look cleaner, have greater clarity and more sales appeal. Longer shelf life too.

Poly Grom is a development so different that it has been protected by a Trade Mark Registration issued exclusively to Tower Packaging Company. No other manufacturer of polyethylene packaging can sell packages with trade-marked, cost-cutting, time-saving Poly Grom.

Write or phone us today . . .  
it's worth your effort.



**TOWER PACKAGING COMPANY**

8216 McCormick Blvd. • Skokie, Ill.

ORchard 5-1005



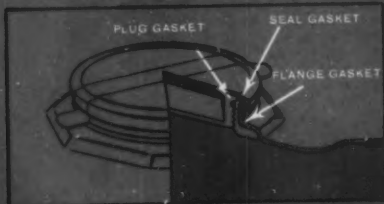
# GET THE INSIDE STORY...



## Tri-Sure® product protection begins inside the drum!

The exclusive Tri-Sure octagonal-shaped flange becomes an integral part of the drum. It is pressed-in so securely that it can't twist loose; sets so flush against the drum stock that you drain the last drop easily when pouring!

It's the ultimate in *inside* protection: the flange gasket is compressed between the flange and the drum stock to form a permanent packing that prevents leakage, seepage and contamination.



But the design and precision manufacture of the Tri-Sure Flange is just one part of the Tri-Sure Closure story. Coupled with the Tri-Sure Plug and Tab-Seal®, it provides

an impenetrable barrier that guarantees product protection — *inside and out!*

Tri-Sure Flanges are available in a wide range of materials. You can specify steel, stainless steel, aluminum or poly-clad. And you can choose the finish you need — zinc plated, tin-plated, chromated, phosphatized or "TRI-SURE®/COATED" to meet any product requirement.

Next time you order drums, be sure you specify *Tri-Sure Closures* for the best in product protection — *both inside and out!*



**AMERICAN FLANGE & MANUFACTURING CO. INC.**  
30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y. • CHICAGO, ILL. • LONDON, N.J. • AILES, OHIO  
CANADA • AUSTRALIA • MEXICO • BRAZIL









## THE BEST SALESMAN FOR CANDY IS CELLOPHANE

Candies, cookies, pretzels, you-name-it — you'll find that cellophane will move a product from the shelf into the home faster than any other packaging material. Why? Because only cellophane provides that crystal-clear transparency that shows a product at its selling best. Plain or printed, cellophane does the job. Call in an Olin Cellophane representative or converter today.

P.S. Olin conducts an integrated advertising and merchandising program to help promote your products. So when you think of cellophane, think of Olin *first*.



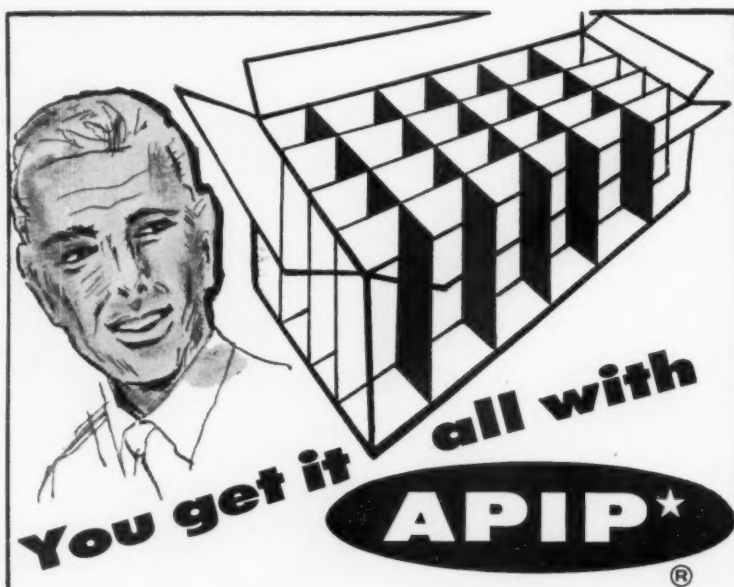
**OLIN MATHIESON  
Packaging Division**

655 Madison Avenue, New York 21, N. Y.

OTHER PACKAGING DIVISION PRODUCTS: CARTONS, CONTAINERS, BAGS, LIGHTWEIGHT PAPERS, WRAPPING TISSUES

BE SURE TO VISIT OUR BOOTH AT THE A.M.A. PACKAGING SHOW — BOOTH NO. 1116





★ American Pre-Assembled  
Interlocking Partitions

- ★ Faster Handling
- ★ Smaller Carton Size
- ★ Less Storage Space
- ★ No Dust or Lint

## AMERICAN PARTITION CO.

Division of Standard Brands, Incorporated

Home Office and Mid-Western Plant:  
3043 N. 30th St., UP 3-5100, Milwaukee 10, Wis.

**WESTERN PLANT:**  
Merced, Calif.  
Randolph 2-2789

**EASTERN PLANT:**  
Bound Brook, N.J.  
Elliot 6-3100

**MID-WESTERN:**  
4900 W. Madison Ave.  
Chicago 44, Ill.  
Austin 7-5559

### Sales Offices

**SAN FRANCISCO:**  
1485 Bayshore Blvd.  
San Francisco 24, Calif.  
Juniper 4-2132

**LOS ANGELES:**  
9118 Sunset Blvd.  
Los Angeles 46, Calif.  
Bradshaw 2-7803

Representatives in all principal cities.

See us at the  
Packaging Show  
Booth No. 133

## Food packaging

The importance of the food package in building a desirable corporate image for both manufacturer and retailer was thoroughly explored at the Food Packaging Council's recent annual symposium in Chicago. Several points were voiced often enough to be of significance to all food packagers:

1. In spite of sharply differing opinions on the proper role of package designer, supplier, advertising agency and consultant in food-packaging decisions, most speakers agreed that the agency is gaining rapidly in this area. The thinking here is that packaging must better reflect the over-all marketing objectives of the manufacturer. Gimmick packaging with no inherent value can make a quick killing in the marketplace, yet do little to further long-range brand acceptance, it was said.

2. The package must play an ever-larger part in building the corporate image. Increasing product similarity is tending to place a bigger burden on the package.

3. Women want more genuine convenience packaging. They are pleased, however, with the recent swing to twisting caps, more convenient bacon packages and other food-packaging improvements.

4. Retailers are intrigued by the cost-cutting possibilities in "tray stocking" (see MODERN PACKAGING, "New Zip for Tear Strip," April, 1959, p. 178.) This method of placing a portion of the shipping container on the supermarket shelf with contents intact is gathering momentum. Many manufacturers have already switched to suitable shippers. Other packagers are now watching the trend closely.

Campbell Soup Co. has been a pioneer in the use of tray-pack shippers. James P. Shenfield, Campbell's director of product marketing, told the group that supermarkets can cut shelf-stocking time 27% with use of the new tray packs. Other benefits of these shippers are quicker consumer identification and elimination of shelf dividers and markers.

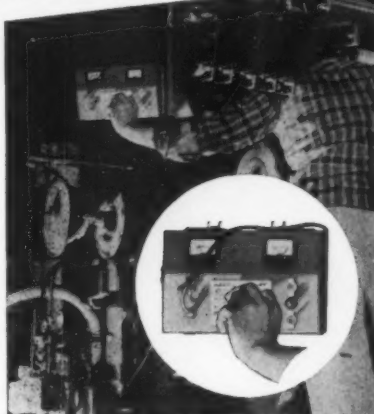
The general standard of food packaging is still rising steadily, most speakers agreed. But they warned food packagers to beware of imitation which they say is plaguing soaps and detergents. ●



# TENSION MASTERY and WEB alignments

Shown on the latest "Heinrich High Speed Printer", the Web Rewind Tension Control, with manually adjustable master controls, becomes completely automatic and compensates for roll build up.

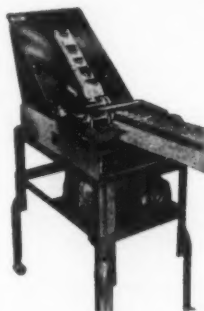
- HANDLES RANGE FROM MEDIUM HEAVY PAPER TO .001 POLY
- SELF LUBRICATING AND COOLING
- JOB PROVEN, OVER 1350 INSTALLATIONS
- INITIAL LOW COST
- MAINTENANCE FREE
- RUGGED DEPENDABILITY
- EDGE ALIGNMENT ACCURACY  $\pm .005"$



## WEB CONTROLS CORPORATION

318 BRIARCLIFFE ROAD, WEST ENGLEWOOD, N. J. TEANECK 3-1640  
SEE US AT THE PACKAGING SHOW, BOOTH NO. 1055

## NEW LABELETTE FEATURES AUTOMATIC ELECTRONIC FEEDER



Designed To Make  
Your Labeling  
Faster, Easier  
and More  
Economical

- New unit automatically feeds, handles and places labels of various lengths onto round containers.
- No buttons to press, no levers to operate, automatic—no hands needed.
- Auxiliary manual feed unit for special labeling applications.
- Labels glass, tin, fiber containers.

Come in for a free demonstration soon  
or write, phone FR 2-1215 for more details.

National Packaging Show Booth #1215

**LABELETTE COMPANY** 216 So. Jefferson  
Chicago 6, Illinois

specialists  
in

the  
most  
inexpensive

## ADVERTISING MEDIA

# TRADE MARK papers

*you're  
in*

*good  
company*

R. H. MACY  
B. ALTMAN & CO.  
BLOOMINGDALE'S  
BONWIT — TELLER, INC.  
ABRAHAM & STRAUS  
YARDLEY OF LONDON  
INTERNATIONAL SILVER CO.  
JULIUS GARFINCKEL & CO.  
SEAGRAMS DISTILLERS CORP.  
STRAWBRIDGE & CLOTHIER  
BARRICINI  
BURDINE'S  
LOWENSTEIN'S  
W. T. GRANT CO.  
HORSMANDOLL  
GERTZ L. I.  
THE MAY CO.  
LIT BROS.  
STERN BROS.

JORDAN MARSH  
J. C. PENNEY CO.  
BAMBERGER'S  
G. FOX & CO.  
HUTZLERBROS.  
THE HECHT CO.  
OHRBACH'S  
THALHIMER'S  
LOVEMAN'S  
BOURJOIS  
SCHENLEY INDUSTRIES, INC.  
WOODWARD & LOTHROP  
BULLOCK'S, CALIFORNIA  
FRUIT OF THE LOOM  
MILLER & RHODES  
JOHN WANAMAKER  
FRANKLIN SIMON  
MAISON BLANCHE  
DAVISON - PAXSON

LANOVA papers suitable for covering  
both set-up and folding boxes.

Flints

Plated

Metallic  
Coated

Metal Foils

Leatherettes

Mica

Dull Coated

Cotton and  
Rayon Velours

Woodgrains

Fancy Prints

*if it's  
PAPER*

Plain and Embossed

Write for free samples and details —  
no obligation!

## LACHMAN-NOVASEL-OWENS

paper corporation

107-111 Greene St., New York 12, N. Y.



# HERE'S Plus Profit on SHEET PLASTIC PACKAGING

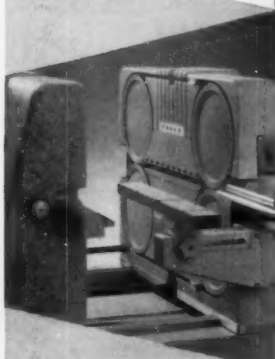
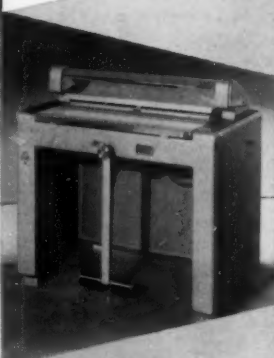


## FASTER BLISTER PACKAGING BLISTER-EDGE FOLDER

Performs 180° edge folds at rate of 600 to 1,200 folds per hour on blister packages made from thermoplastic sheet from .003" to .020" in thickness. Heated 18" blade actually molds sheet into desired fold to accommodate slide-in cardboard bottom. No tearing or opening up.

## 700 FOLDS PER HOUR FOLDER-CREASER

This dual-purpose 30" sheet plastic fabricator gives you the advantages of TWO machines at ONE price. The Folder-Creaser handles sheets .003" to .020". Folds minimum of 700 per hour at 180° and "instant creases" 90° angles at minimum of 1,200 per hour without rejects, tearing or opening up.



## BEAD 2 EDGES AT ONCE DUAL-EDGE BEADER

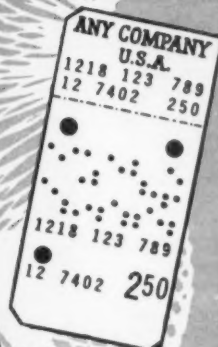
Simultaneously beads both edges of plastic sheet, roll, die cut blanks and strips. .005" to .020" thickness, 2" to 20" wide. Nine different beads and Specials! High speed production! 500" to 1,000" per MINUTE. Each head can be used independently as a single edge beader if desired.

WRITE FOR LITERATURE describing folding, creasing, beading, drawing and forming machines.

## TABER INSTRUMENT CORPORATION

111 Goundry Street Section 12  
North Tonawanda, New York  
Telephone LUdlow 2626 TWX - TON 277

## put FLEXIBILITY in your LABELING OPERATIONS



## with TAGS, TICKETS, LABELS and LABELING SYSTEMS by KIMBALL



- Eliminate preprinted label inventories
- Imprint exact quantity needed
- Easy and economical to operate
- On all types of label and tag stock

For further information write Dept. MP-1

A. KIMBALL COMPANY, REWE STREET, BROOKLYN 11, N. Y.

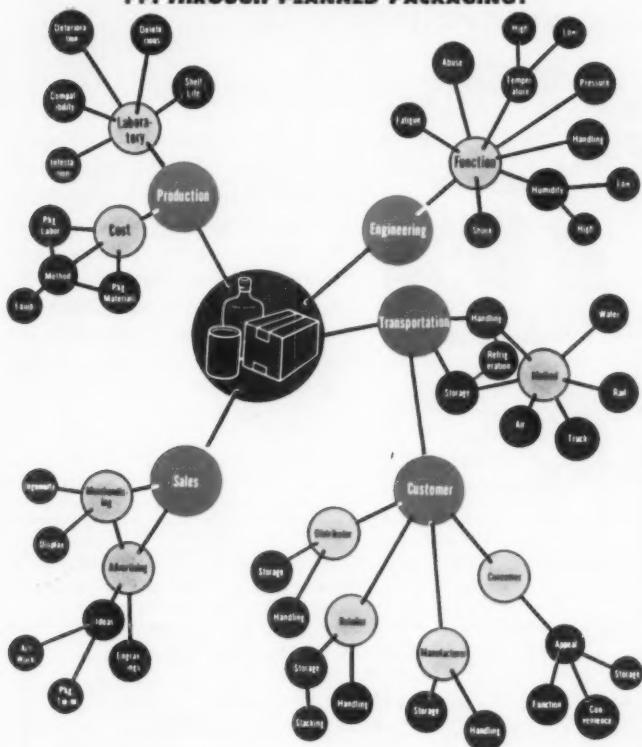


Offices in New York, Chicago, Los Angeles and other principal cities in U. S.  
CANADA: A. KIMBALL, LTD., 85 Advance Road, Toronto 18, Can.

Specialists in Product Identification and Integrated Data Processing



**... THROUGH PLANNED PACKAGING!**



- CONSULTATION
- RESEARCH and DEVELOPMENT
- CREATIVE FUNCTIONAL DESIGN
- PACKAGING COST ANALYSIS
- PACKAGING SPECIFICATIONS
- COMPLETE LABORATORY TESTING
- PLANT PACKAGING SURVEYS

Is your packaging planned to meet the ever-changing functional requirements of your customers . . . and to produce the maximum benefit for your Sales and Advertising Departments at minimum cost to Production and Engineering?

Write for more details about our  
"PACKAGING AUDIT"

W. SCOTT HASSLER  
ASSO

ASSOCIATES

## PACKAGING CONSULTANTS

INDUSTRIAL      CONSUMER

2601 Peterson Avenue, Chicago 45, Illinois

## [Continued from page 151]

Waste is kept to  $\frac{3}{8}$  in. on each edge of the strip and between cups in all directions.

Speed of output is governed largely by the time required for cooling the formed sheet and, to a

The machine reportedly operates at a high level of efficiency. Fifteen minutes are required to heat up from cold at the commencement of each day's operations and there is a loss of at least 18 cups from initial forming to final registration at the start. The combined die-plus-vacuum tools are said to eliminate malformed cups.

For a change-over in shape or di-

A new model of the machine providing six-cavity molds reportedly operates at 4,500 units per minute.

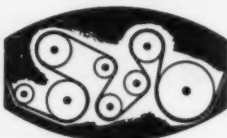
The machine is now available in the United States and Canada through U. S. representatives of the Swiss manufacturer. ●



**When you need a special machine for a special printing or converting job...**

**Manhasset**  
**offers...**

**SPECIALIZED  
EXPERIENCE**



**IMAGINATIVE  
THINKING**



**PRACTICAL  
DESIGN  
ENGINEERING**



Got a problem in printing or converting film, foil, paper, board or other flexible roll material? Put it up to MANHASSET. Here you get the benefit of our extensive experience in custom-building of machines to do problem jobs... our daringly different creative thinking... our hard-headed, down-to-earth engineering—a unique combination that assures a practical answer to any solvable printing-converting problem

**MANHASSET**

**MANHASSET MACHINE CO.**

409 Bayview Avenue, Amityville, New York

**WEB PRINTING PRESSES** — Flexographic, Gravure, Letterpress, Lithographic for roll-to-roll printing of Cellophane, Polyethylene, Paper, Board and other flexible materials.

**BAG-MAKING MACHINES** — for notion, millinery, specialty bags, hand-grip, flat, square, gusseted and multiwall types and vacuum cleaner bags.

**COATING, TINTING, and laminating machines**

**CONSTANT TENSION and WEB GUIDE UNITS**

**REWINDERS • SLITTERS • SHEETERS • STACKERS**

**TYPE**

**DWA**

Automatic Filling Balances for Packaging, Batching, Flow Control

**TYPE**

**KWA**

Automatic Check-weighing and Sorting Balances for Check-weighing, Sorting, Statistical Tabulation, Machine Control

**FEATURES:**

**ACCURATE** • Accuracies of up to  $\pm 5$  mg for control of fine weights

**AUTOMATIC** • Complete connections built into each unit for co-ordination with transport systems and recording devices

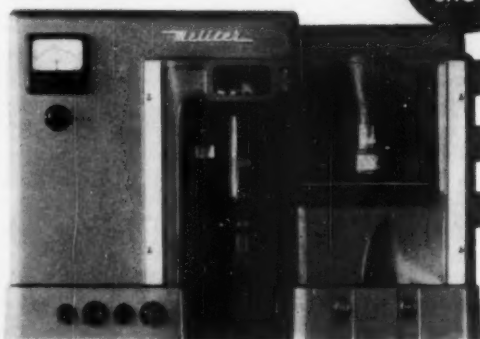
**RELIABLE** • Plug-in unitized electronic components, printed circuits for longest trouble-free life

Write today for complete literature on automated high-precision weighing. BETTER STILL, SEE US AT BOOTH 1308, NATIONAL PACKAGING EXPOSITION, ATLANTIC CITY.

**BALANCES**

**FOR AUTOMATED  
PRODUCTION:**

**BOOTH  
1308  
AT THE  
SHOW**



**METTLER INSTRUMENT CORPORATION**

**HIGHTSTOWN, NEW JERSEY**



## Packaging Data from AMA

### PACKAGING RESEARCH: AN INVENTORY

Where to find latest data on packaging trends and techniques. Prepared under the auspices of AMA's Packaging Advisory Committee, this Research Study is a classified inventory of sources of information on packaging research. Includes a survey of packaging research needs, and reports special requirements of particular industry groups. "Should be on the desk of every man and woman interested in packaging, whether a buyer, a seller, a consumer, or a manufacturer of packages"—G. W. Aljian, Vice-President, California and Hawaiian Sugar Refining Company.

(\$6.00)

Other AMA books for executives who must keep up-to-date on packaging developments:

**PACKAGING FOR SALES AND SHIPMENT** (\$3.75)

**MANAGING THE MATERIALS FUNCTION** (\$3.75)

**INTEGRATED PACKAGING AND MATERIAL HANDLING** (\$2.25)

**PLASTIC SHEET FORMING** (\$3.75)

**KNOW YOUR PACKAGING MATERIALS** (\$3.00)

Order from *Packaging Books*, AMA, 1515 Broadway, New York 36, New York.

**American  
Management  
Association**

## Seal for spray can

[Continued from page 175]

the expanded sales volume to be expected from greatly broadened distribution and improved product protection will more than make up the difference in cost.

Despite the fact that its consumer line of spray paints encompasses a wide range of colors, Plasti-Kote holds the line on container costs by limiting inventory to only two basic, pre-printed can styles—the 8-oz., paper-labeled Car Color can and the 16-oz., lithographed general-purpose can. Product color identification is achieved in two ways: (1) Can caps are pre-sprayed to match the color of the paint inside the container and (2) an automatic marking attachment imprints color data on the cans as they travel through the packaging line; this information is imprinted on the closure of the 8-oz. can and around the bottom edge of the larger 16-oz. can.

Plasti-Kote's success in achieving a marketing breakthrough by clearing up a packaging problem that had restricted its distribution should spark similar thoughts among packagers in many product fields. It also suggests a method by which other aerosol packagers can win favor among retailers (by eliminating a housecleaning chore) and among consumers (by insuring that they will get all packaging components and full product measure). ●

## Heat processing

[Continued from page 211]

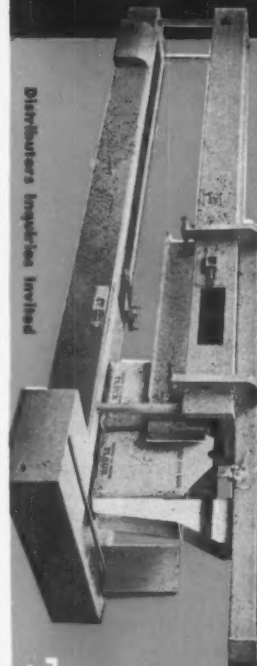
in the weight loss compared with the process at 212 deg. F. However, the losses observed were small and insignificant compared with the total amount of material in the package.

4. *Estimation of permeability constants on the basis of package tests at various temperatures.* Since the results obtained on calcium chloride-filled bags at 100 deg. F. and 91% R.H. showed satisfactory agreement with the results of standard TAPPI tests at the same conditions, it was decided to calculate the permeability constants on the basis of package tests at other temperatures.

The following assumptions were made in the calculations:

1. The permeability constant was assumed to be independent of thick-

**How To Save  
100%  
OR MORE  
On Sealing  
BALER BAGS**



Distributors Inquiries Invited

**THIS  
IS THE  
Tol-O-Matic  
AUTOMATIC BALE SEALER**

... and here is how and why you can make such tremendous savings with it!

**LABOR SAVING**  
100% OR MORE OVER HAND-SEALING METHODS WHERE NORMAL PACKAGING MANPOWER IS USED. PACKAGING OPERATION IS CUT TO 1 MAN.  
**AVERAGE MINIMUM ANNUAL LABOR SAVINGS \$5,200.00**

**MATERIAL SAVING**  
TAPE SAVINGS OVER BEST GLUE COSTS LESS THAN 7% OF SEALING COSTS. EXAMPLE: PLASTIC SIZE BALE TAP OF 2,400 AVERAGE PER 8 HOUR DAY CAN...  
**SAVE EACH DAY IN MATERIAL ALONE \$18.00 OR ANNUAL SAVINGS OF \$5,616.00**

**MINIMUM SAVINGS (COMPUTED ON 2,400 BALES IN AN 8 HOUR DAY WEEK) AMOUNT TO \$10,816.00 PER YEAR**

**Tol-O-Matic, Inc.** 246 Tenth Avenue So. Minneapolis 15, Minn.



ness, partial pressure difference, time of test and area.

2. The diffusion through seals was considered negligible.

3. Resistance to diffusion of the paper bags inside the film bags was considered negligible. (This assumption was tested experimentally and the resistance of the kraft paper bags was found to be less than 1/20 of that due to polyester and less than 1/400 of that of 3-mil high-density polyethylene.)

4. The calculation of permeability at 212 deg. F. was based on the assumption that the diffusion took place during the 30 min. of the process, neglecting the diffusion during heating and cooling.

5. The calculations on the bags filled with agar gel were based on the additional assumption that the partial pressure of water in the gel was equal to the vapor pressure of water at the test temperature.

6. The "extrapolated" values for 212 deg. F. were based on standard tests at 73 and 100 deg. F. and were extrapolated assuming the validity of the relation  $P = P_0 e^{-E/RT}$

where:  $P$  = permeability constant  
 $P_0$ ,  $E$  = constants for a given material  
 $R$  = gas constant  
 $T$  = absolute temperature

The results of the estimations are shown in Table VI. It appears that permeability constants with an accuracy sufficient for design and engineering purposes may be estimated by package tests. Permeability constants at 212 deg. F. appear to be within the range of values expected by extrapolation. The observed discrepancies are not surprising, since some of the assumptions made are known to have a limited range of application (6).

#### Summary and conclusions

The effect of heat processing in steam on the carbon dioxide, oxygen and water-vapor permeability of several heat-resistant films has been studied.

Heat processing in steam appeared to have little effect on the gas permeability.

The water-vapor permeability of polyethylene-type films in general was decreased as a result of heat processing at 250 deg. F., whereas an increase was observed with polyester films. The other films showed only small differences in their per-

meability to water vapor after heat processing.

The water-vapor permeability of several of the films in package form was also studied before, during and after heat processing. The results before and after processing were, in general, similar to those obtained by the standard method. The uptake of water by packages containing calcium chloride during processing at 212 deg. F. was small relative to the total contents and the loss in weight of packages filled with agar during processing at 212 deg. F. and at 240 deg. F. was also small.

Estimations of the permeability of constants on the basis of standard tests and package tests indicate good agreement with the expected effect of temperature on permeability.

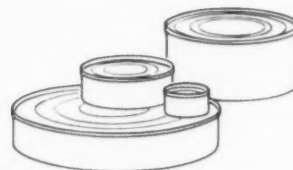
#### Acknowledgment

The authors are grateful to the American Viscose Corp. for the grant-in-aid which made this work possible.

#### References

1. Chester Packaging Products Corp., "The Chester Bag Method of Testing Water Vapor Transmission," *Chester Information Bulletin*, Oct.-Nov., 1954.
2. Davis, E. G., Karel, M., and Proctor, B. E., "Film Strengths in Heat Processing," *MODERN PACKAGING*, 33 (4), pp. 135-137, 208, 211 (Dec., 1959).
3. Davis, E. G., Karel, M., and Proctor, B. E., "The Pressure-Volume Relation in Film Packaging During Heat-Processing," (in press).
4. Heiss, R., *Verpackung feuchtigkeitsempfindlicher Lebensmittel*, Springer-Verlag, Berlin, 1956.
5. Hu, K. H., Nelson, A. I., Legault, R. R., and Steinberg, M. P., "Feasibility of Using Plastic Film Packages for Heat-Processed Foods," *Food Technol.*, 9 (15), pp. 236-240, 1955.
6. Karel, M., Proctor, B. E., and Wiseman, G., "Factors Affecting Water Vapor Transfer Through Food Packaging Films," *Food Technol.*, 13, pp. 69-74, 1959.
7. Landrock, A. H., and Proctor, B. E., "The Simultaneous Measurement of Oxygen and Carbon Dioxide Permeabilities of Packaging Materials," *TAPPI*, 35 (6), pp. 241-246, 1952.
8. Nelson, A. I., Hu, K. H., and Steinberg, M. P., "Heat-Processible Food Films," *MODERN PACKAGING*, 29 (10), pp. 173-179, 248, 250-251 (June, 1956).
9. TAPPI Standards, "Water Vapor Permeability of Paper and Paperboard," Method T 448/M-49. •

*A fine container  
always completes  
the "brand" — but each  
container problem  
IS different*



As with Chap Stick, individual requirements usually call for individual solutions.

*For instance, for some processors, we are finding the best answer in drawn aluminum containers with compounded ends. They offer advantages for prepared foods and cheeses, drugs, liquids, automotive and machinery parts, bearings in oil, fine instruments — or other items requiring completely air-tight protection.*

There are 18 sizes. Ends may be beautifully lithographed (we help with design development, if you wish) and bodies may be coated inside and out. They're tough, lightweight, very economical.

This is but one of the interesting container developments on which we'd like to give you full information. *One may solve your particular needs.* If you will cite your container problems, we will send samples—or suggest that you talk with one of our highly qualified representatives.

J. L. CLARK MANUFACTURING CO.,  
Rockford, Ill.; Liberty Division Plant  
and Sales, Lancaster, Pa.; New York  
Sales Office, Chrysler Bldg., N. Y. 17



*this is fine lip medication ...*

*this is the*

**CHAP STICK**

*that people  
know*

*see  
buy*

*like  
buy again*



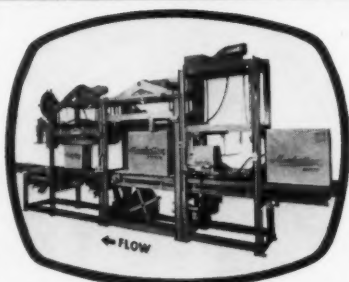
MARKETED IN LITHOGRAPHED METAL CONTAINERS CUSTOM STYLED AND MANUFACTURED BY



**J. L. CLARK**



# YOU'D LIKE TAPE SEALING BEST- IF YOU HAD TO OPEN 'EM



Serving 3-M Co. in Booth 212-30 AMA Show

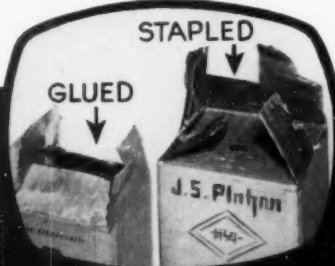
**GENERAL'S  
NEW SELF-SETTING  
CASE - SEALER - TAPER  
FOR MIXED SIZES**  
Is now in plant operation  
**IT'S A MARVEL IN TAPE  
SEALING AUTOMATION**

These Manufacturers\*  
use

**GENERAL'S**

**CASE-SEALER-TAPER**  
to Tape Seal the Modern Way.  
Tape RIP-CORD applicator optional

It's so easy to open without injury to persons, contents or shipping cases. Cases are more dust proof, more pilfer proof and are undamaged for re-use. Everybody gains.



\*Names on request

These Manufacturers  
use  
the old fashioned  
methods

These glued or stapled cases must be torn or cut open. It's not easy, it's dangerous to persons and contents. It also wrecks the box. You don't win much customer good-will this way.

**COMING SOON !**

**LOW COST AUTOMATIC SELF MEASURING  
TAPE DISPENSER for RANDOM CASE SIZES**

It costs to put off... Windsor 4-0644

**General Corrugated Machinery Co., Inc.**  
PALISADES PARK 3, N. J. CABLE: GENCO

## Push-up confection

[Continued from page 179]

gauge moistureproof cellophane, bonded for water resistance and freezing. Prior to the coating, the cellophane outer surface is reverse printed for a more attractive, glossy package appearance. DCA points out that the tough, stable film combines at low cost the machinability of cellophane with the heat sealability of polyethylene.

On the machine, pouches are automatically formed, filled and sealed four at a time. Mounted on reels in front of and behind the machine are twin webs of film. Each has four package facings aligned side by side across its width. These webs meet inside the machine, with their polyethylene surfaces together, where they are vertically heat sealed into four connected tubes of equal width. The multiple-tube strip then moves down through the machine for bottom heat sealing, filling with the flavored liquid and top sealing and cut-off at 10-in. intervals.

Simultaneously with the filling and sealing operation, the four laterally connected pouches either are severed from each other or are partially separated by vertical perforations, depending on the individual packager's marketing plans. The severed pouches can be sold individually; the perforation-joined pouches encourage multiple-unit purchases.

As the filled and sealed pouches come off the machine, they are packed into cartons and taken to a hardening room for freezing.

Gold Mine Icicles are sold singly or in multiples of four perforated pouches containing up to four different fruit flavors. A new eight-pack carton is being tested in supermarkets and other self-selection stores. At present, Minute Maid Orange Bars are marketed only in cartons of four pouches each. ●

## Molded in miniature

[Continued from page 194]

insisted on the three-color package—blue body, yellow cap and white lettering—for which a brand franchise had been built up over a period of many years. So the polyethylene tube had to be molded of yellow resin. This requirement launched a long series of trial-and-error revisions in the printing pro-



# DESIGN IT

## WITH SHOWMANSHIP



To sell the booming carriage trade, CCA helped design a line of printed **prestige** packaging for Stouffer's frozen foods. Note how the new carton (foreground) out-sparkles the old one. Rich colors, printed right on all six sides of the carton itself, work harmoniously with arresting illustrations to present your brand name dramatically. No unwieldy overwraps. Cost less, too. To **pack it—move it—sell it** is the business of CCA packaging.

### CONTAINER CORPORATION OF AMERICA

Chicago 3...and all key marketing areas. Folding Cartons, Shipping Containers, Sefton Fibre Cans, Molded Plastic Products



cedure to arrive at a final decision.

To attain ultimate production speed, transparent flexographic inks had to be used. But when blue was laid down on the yellow can, the result was a muddy, greenish color rather than the familiar Morton blue.

The same problem occurred with the deep brown chosen for the pepper container. Some portions of the package were designed to be white, but printing the white in small blocks caused show-through on the blue or brown and made perfect register mandatory. These color distortions were attacked by first laying down a coat of white ink under all areas covered by the blue as well as those intended to be white. This couldn't be a solid coat of white, however, because portions of the Morton girl's dress as well as the lettering required the yellow color of the container to show through.

Meanwhile, the press used for printing the containers, while guaranteed to turn out only 50 units per minute, was actually running well at 100 per minute. With the addition of a second set of printing plates, Morton felt sure it had a potential of the hoped-for 200 per minute.

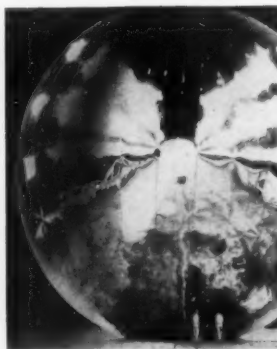
Tests were run during the winter and spring months when the plant was heated and drying conditions ideal. But with the advent of hot, humid weather, it became evident that there wasn't enough drying time even with the addition of heat. Ink began to smear badly and the second set of plates had to be removed from the printing press.

Next a temporary compromise was worked out between the company's merchandising and production departments. The yellow in the girl's dress and in the lettering was eliminated for the time being, leaving the design areas solid white. The yellow in the design may go back in when printing progress allows it. The compromise allowed a production rate of 200 per minute, thought to be a new high speed for printing of polyethylene containers.

At first, Morton's printed miniatures tended to have too much ink rub-off. Experiments with ink formulations and varnishes are said to suggest a solution to this problem.

The company believes all components of its new container will satisfy FDA requirements. It is demanding assurance of FDA acceptance from all suppliers. ●

## Standard's marketing approach to packaging pays off... in many unusual ways



### The world's biggest package

It's as big as a 10-story building, but weighs only 150 lbs.! This giant space balloon is made of metallized plastic film just .00025 of an inch thick, but it withstands the extreme hot and cold temperatures of space travel, the heat of the launching rocket—and folds into a metal container only 30 inches in diameter. The film itself is Mylar® metallized by Standard's *National Metallizing Division*.



### Tough tabs solve sticky problems

The average man, eating out, got plenty sore about tabs that tore off when he tried to open small individual servers of syrups, jellies, and honey. Packers sympathized with him, took the problem to Standard's *Closure Division*. Result: a tab lid that does not tear, is also airtight-lined with Saran® to keep delicate flavors longer.



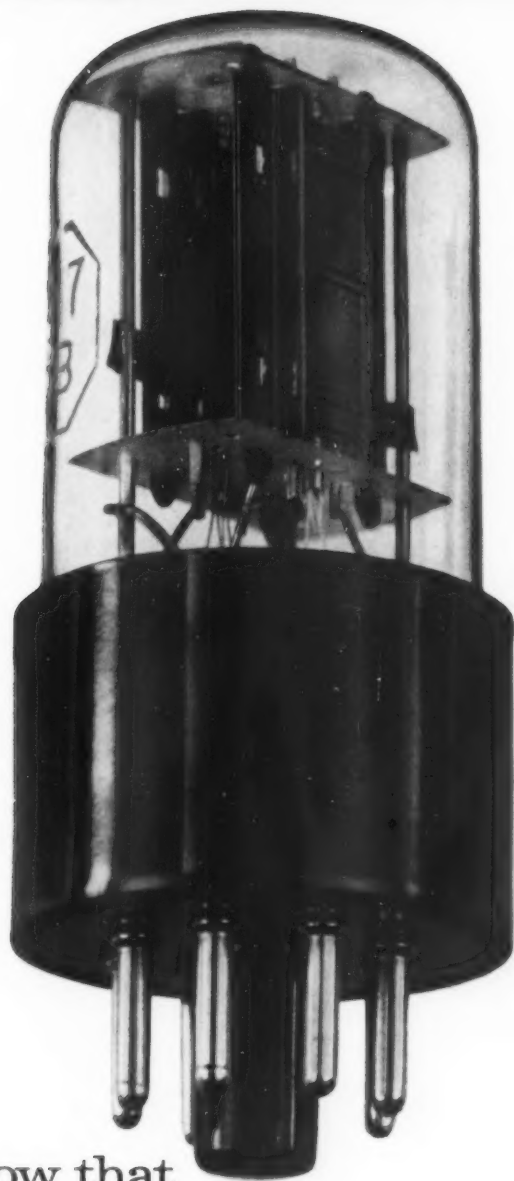
### "Test" package sells lingerie

A lingerie manufacturer recently introduced a new type of luxurious, super-stretchable fabric for his panty line. He felt it would sell itself if packaged so that women could *touch* it, test-stretch it. Standard's *Bradley Gilbert Division* designed the individual package with a sturdy, metal-knobbed, pull-out drawer. Displayed on a counter rack, "It's going great," says the lingerie man.

FILM • FOIL • PAPER AND BOARD PACKAGING • PAPER PLATES • CUPS • BOWLS AND TRAYS • FINE PRINTING AND BUSINESS PAPERS • PAPERBOARD AND PULP STOCK  
ALL FROM ONE COMPLETELY INTEGRATED, CONVENIENT SOURCE

STANDARD PACKAGING CORPORATION





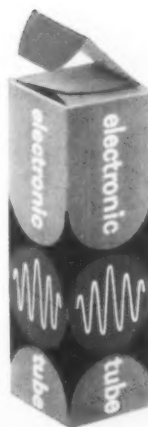
Did you know that  
**3 out of 4 electronic tube makers**  
 use cartons  
 by **Standard Packaging?**

It's hardly surprising when you consider the scope of Standard's *marketing* approach. In this case, it resulted in the first *suspension* package for tubes.

• The electronic tube, a study revealed, must be protected against many people besides the freight handler. • The consumer, because he has an entrenched habit of *shaking* before buying. The repair man, because tubes take a beating in his tool kit. The dealer's stock boy, because he frequently stacks tubes as if they were boxes of nails. • Does *your* package perform all the safeguards and selling functions it should? Standard's marketing approach could be the answer.

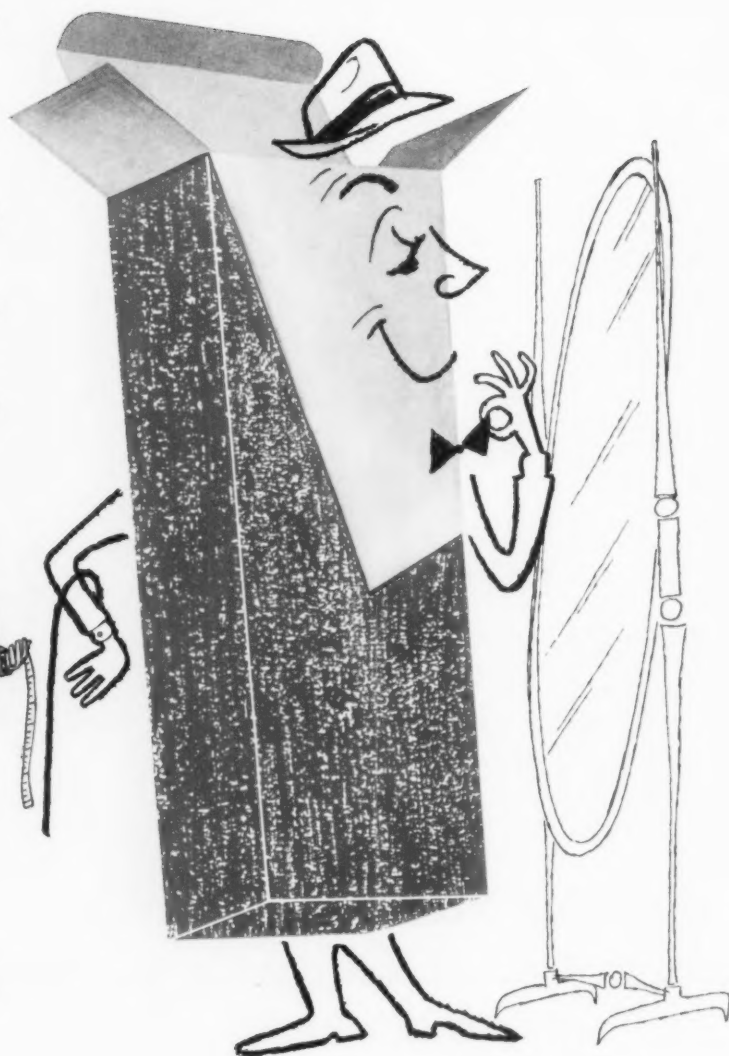


STANDARD PACKAGING CORPORATION • Executive Offices: 200 East 42nd Street, New York 17, New York





THE WELL DRESSED  
PRODUCT  
GOES TO RTG  
FOR ITS  
WARDROBE



designed for beauty and protection

**THE RICHARDSON-TAYLOR-GLOBE** CINCINNATI

FOLDING CARTONS • PARAFFINED CARTONS • BOX WRAPS • DISPLAY CONTAINERS





The world's oldest craft in metal is of ancient origin—first known at about the beginning of the Christian era. There was then a centre for craftsmanship and technical high performance during the time of Alexander the Great, Antioch and Seleucia. Among the first works of art at the important Roman period were, for example, a silver vase, a gold medal of the 1st century A.D., decorated with a scene representing a battle, a silver vase in the shape of a water sprinkler or a vase with a handle, and ornaments of various types containing gems worked into a polished and decorative art. And gold, decorated with, used for ceremonial offerings of gold in ancient temples.

Leontopodium 100 mg/ml, 100 mg/ml

## Artistry in Gold, by Artcote

Artcote's specialty papers are available in metallic coated gold, silver and copper finishes, glossed or unglazed, embossed or plain. Paper stock available in 60 lb. weight, cover stock available up to 15 point. All Artcote papers and cover stocks accept halftone, four color process, silk screen, gravure, offset lithography, letterpress, and photographic printing. Write today for sample book.

# ARTCOTE®

Available through your paper dealer or from:

**ARTCOTE PAPERS INC./Irvington, New Jersey**

also Office and Sales Office, Irvington, New Jersey • Plants: Irvington and New Brunswick, New Jersey







## Double identity

[Continued from page 153]

The milk packages are color coded to distinguish the different kinds of milk. And unlike the previous designs, positive identification has been provided.

On the ice-cream cartons, the flavor is immediately and unmistakably apparent through characteristic color styling and a bold flavor legend on all panels, while glamorous realistic product illustrations are calculated to whet the appetite.

The Quality Chekd Dairy Products Assn., which has grown from 22 independent-member dairies when formed in 1944 to its present membership of 121, maintains an independent laboratory for quality control, a product-development research kitchen and provides central buying facilities for dairy supplies and other services. It will back the appearance of the new Quality Chekd trademark and package designs with a powerful advertising and promotional campaign, consisting of posters, store banners and displays, merchandising aids and newspaper ads to support the new packaging program. •

## Exact electronic count

[Continued from page 166]

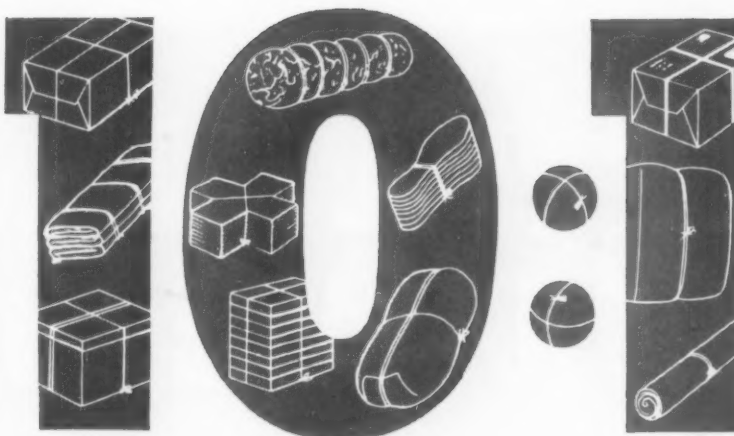
pressure bar positioned above the tracks can be flipped out of the way while the operator removes the object without stopping the machine.

Harper makes an effort to schedule its packaging runs by successive screw diameters to hold adjustment time to a minimum. As a double check for accuracy before each run, the machine operator usually hand counts a gross of the pieces to be packaged and places this full box on a small scale. During the run he occasionally spot checks the weight of a box filled by machine against that of the hand-packed box. There is seldom any deviation.

The machine's single operator also has time to fit the lids on the boxes and stack them onto a rolling table. They are then wheeled across the aisle for hand application of end labels and stamping of identity.

Highlights of the new package design include the following:

1. Establishment of a basic Harper  
[Continued on page 296]



# machine tying beats hand tying 10 to 1

If you are now hand tying packages, cartons, bundles, parts, printed matter, mail... anything... then major savings can be yours by using a Bunn Package Tying Machine. It ties anything that can be tied by hand... up to ten times faster.

**Adjusts automatically:** The Bunn machine adjusts automatically to mixed packages of all sizes or shapes. It always uses exactly the right amount of twine, ties a tight, foolproof bow knot and cuts the twine close for maximum economy.

**Operation is simple:** Just place the package on the tying table and step on the trip. The machine does the rest... in 1½ seconds or less.

**A model for every use:** Bunn has many models to meet the special requirements of those with unusual tying problems... extra large boxes, long narrow bundles, over-size flats, cylindrical shapes, and others.



Bunn machine automatically tying a double wrap on a large carton with a neat, slip-proof knot.

**Mail the coupon today** for a fact-packed booklet which illustrates the many advantages of Bunn Tying Machines. There is no obligation.

PACKAGE TYING MACHINES—SINCE 1907

# BUNN

**B. H. BUNN COMPANY**

7605 Vincennes Ave., Dept. MP-30, Chicago 20, Ill.  
Export Dept.: 10406 S. Western Ave., Chicago 43, Illinois

**MAIL THIS COUPON NOW**

B. H. BUNN COMPANY, Dept. MP-30,  
7605 Vincennes Ave., Chicago 20, Ill.

Please send free booklet which illustrates how we may cut costs with Bunn automatic tying.

Name

Company

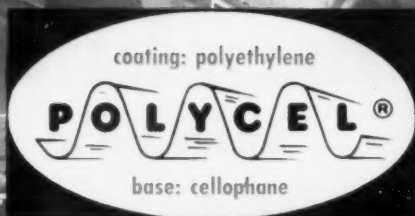
Address

City  Zone  State



# 5 POLYETHYLENE COATERS

AT **HPS**



*See these protective materials  
at Booth 122 • Packaging Show*

- Polyethylene coated papers
- Polyethylene coated mylar
- Polyethylene coated foils & fabrics
- Polyethylene coated acetate
- Special high-density polycoatings
- New opaque white POLYCEL



*Polyethylene Coated Films / Papers / Foils / Fabrics & Combinations of Each*

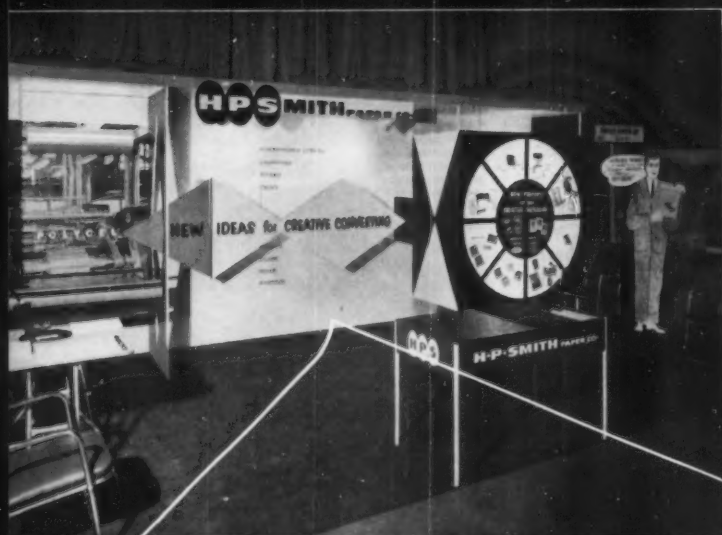
## CALL YOUR CREATIVE CONVERTER OR **HPS**

H. P. SMITH PAPER CO. / 5001 WEST SIXTY-SIXTH STREET / CHICAGO 38 / PORTSMOUTH 7-8000



# 37 AUTHORIZED POLYCEL CONVERTERS

UNIQUE PRODUCTION COORDINATION  
FOR USERS OF FLEXIBLE PACKAGING



**CREATIVE COATINGS**  
for every type of protection,  
for many types of products...

IT ADDS UP TO:

☒ **VERSATILITY**

backed by adequate capacity.

☒ **CREATIVENESS**

New materials for new packaging applications.

☒ **DEPENDABILITY**

and Quality from your near-by cooperative converter.

*Polycoated or polycombined laminations in sheets or rolls...printed or plain are available in production quantities as part of the service from your near-by Polycel converter...*

**HPS H·P·SMITH**  
PAPER CO.

ORIGINATORS OF PROTECTIVE PACKAGING



# Want your labels Removable?

use these special  
**KLEEN-STIK®**  
**Low-Tack**

Pressure-Sensitive Stocks



**IF YOUR LABEL** is the kind that should come off . . . and come off clean and easy . . . be sure it's printed on the right KLEEN-STIK stock. KLEEN-STIK—pioneer and specialist in pressure-sensitive label stocks—has many special grades coated with "low-tack" adhesive that go on and come off with equal ease.

- Litho No. 620-L
- Kromekote No. 720-K
- Foil No. 450-M  
(Gold or Silver—Bright or Dull)
- Clear Acetate  
2-mil No. 220-CA 5-mil No. 520-CA  
3-mil No. 320-CA
- Colored Litho No. 620-CL
- Flex-Stik  
No. 420-FSA, 620-FSB
- Vinyl-Stik

See them at  
BOOTH 663  
PACKAGING SHOW  
ATLANTIC CITY

Write for free samples, full details

**KLEEN-STIK** Products, Inc.

1934-1959 . . . 25 Years of  
Pressure-Sensitive Leadership

7300 W. WILSON AVE. • CHICAGO 31, ILL.

[Continued from page 293]

package color—a vivid golden orange—which is echoed in advertising, catalogs and other graphics.

2. Use of related package design. Four different surface designs are employed, resulting in a mixture of related packages appearing on the customer's shelf.

3. New emphasis for both the Harper brand name and the Harper family of products.

4. Quick identification of specific metal content by varying the colors of applied content-identity end labels, using one color for each of the basic metals used.

The new boxes, of Brightwood folding style, have been given a quality effect through the addition of a white patent coating to the 40-point kraft back. Both box lid and base are printed in the golden-orange color because it shows scuff marks far less than white. Lettering is black with portions of the white surface showing through for varied design treatments.

On the glued-on end labels, green is used to denote one kind of stainless steel, white for another stainless type, orange for silicon bronze and copper, yellow for naval bronze blue for monel, canary for brass—all with black printing. Labels for aluminum products are white with blue printing. Exact product description, size and quantity are imprinted by Harper in the appropriate space on the label.

The entire program is said to be paying off in increased brand recognition, greater operating efficiency and customer satisfaction. ●

## Nested cameras

[Continued from page 186]

Appearance of the finished part is the same over-all, though the surface produced by the pre-expanded beads is softer to the touch. But use of pre-expanded beads where less strength is necessary has sharply reduced the amount of bead material that is required for each part and hence has helped keep down the total over-all cost of the new package.

When experimenting with the polystyrene foam, B&H considered but rejected pastel colors. They would have added somewhat to costs and B&H reasoned that for its type of product the plain white color con-

# Want your labels Permanent?

use these special  
**KLEEN-STIK®**  
**HIGH-Tack**

Pressure-Sensitive Stocks



**MANY LABELS** are intended to remain in place on product or package. To make sure your labels stay put, specify one of KLEEN-STIK's special "high-tack" adhesive stocks—they go on easy, yet stick tight on any smooth, hard surface. With KLEEN-STIK, you know you're getting the best pressure-sensitive stock for the job.

- Litho No. 670-L
- Kromekote No. 670-K
- Foil No. 470-M  
(Gold or Silver—Bright or Dull)
- Clear Acetate  
2-mil No. 270-CA 5-mil No. 570-CA  
3-mil No. 370-CA
- Colored Litho No. 670-CL
- Fluorescent No. 670-FL
- "Tamperproof" Litho No. 570-TP

See them at  
BOOTH 663  
PACKAGING SHOW  
ATLANTIC CITY

Write for free samples, full details

**KLEEN-STIK** Products, Inc.

1934-1959 . . . 25 Years of  
Pressure-Sensitive Leadership

7300 W. WILSON AVE. • CHICAGO 31, ILL.



veyed a desirable quality impression.

In place of its former three-color folding carton, B&H has a glamorized corrugated shipping container with bleached white kraft liner printed in an abstract blue and gray design. B&H abandoned the folding paperboard carton for three reasons: (1) the molded polystyrene-foam parts fit together so neatly that they need no enclosing box for support; (2) use of the black pedestal with descriptive label allows the camera to identify its brand prominently whether in a counter showcase, display window or back shelf, and (3) the corrugated shipping container itself is now sufficiently decorative and salesworthy.

Board weight for the new shipper is the same as previously used—200-lb. single wall—but B&H has switched from C flute to B flute for the latter's printing qualities.

The new shipper has been carefully oriented to dealer needs. It has a 3-by-5-in. color-coded label at one end, with the model illustrated as a halftone for quick identification. The model number is printed on the label's top and sides, with type facing in three directions to assure product identification no matter how the package is stacked. This improvement was incorporated on the advice of the company's Retailers Advisory Council.

The package is so compact and simple that buyers are expected to retain it for protection of the camera in home storage.

But its advantages to the dealer are the package's strong point. Camera stores are not exclusive dealerships; usually they carry a number of competing lines of photographic equipment. And the retailer wields more influence in closing the sale of a camera than he does for many other types of merchandise. The ease with which the new package can be taken apart and re-assembled is said to obtain more display space for the various B&H camera models. The black pedestal, scarcely larger than the camera base, remains in place without being held. Dealers can grasp a camera and the pedestal remains attached. Thus displays can be set up or moved at will. And product details on the back of the display card prompt the dealer salesman as he shows the Bell & Howell camera to a prospective buyer. ●

## ATTACHES HINGES to set-up boxes faster than ever!

### NEW GEISSEL motor-driven ATTACHING MACHINE



6-FT. STRIPS  
AUTOMATICALLY FED

- ⊙ Faster than current methods
- ⊙ Cuts single hinges from 6-ft. strips
- ⊙ Suitable for both wood and paper set-up boxes
- ⊙ Saves time, cuts labor costs
- ⊙ Safe operation

Send a box for  
free sample hinge  
attachment. Price  
and operating de-  
tails on request.

**GEISSEL mfg. co., inc.**

109 Long Ave., Hillside, N. J., U. S. A.

Add  
to your  
sales  
"Impacts"

**EXTRUDED  
ALUMINUM  
CANS  
from CLARKE**

Engineered to your specifications

Clarke rigid aluminum cans are the perfect  
answer for those difficult-to-package products.

They're seamless and strong . . .

. . . lighter to ship—40% lighter than conven-  
tional cans of equal size . . .

. . . available in a wide range of shapes and  
constructions—in diameters up to 3" and  
lengths up to 25".

For free samples and additional details,  
write, wire or phone today.

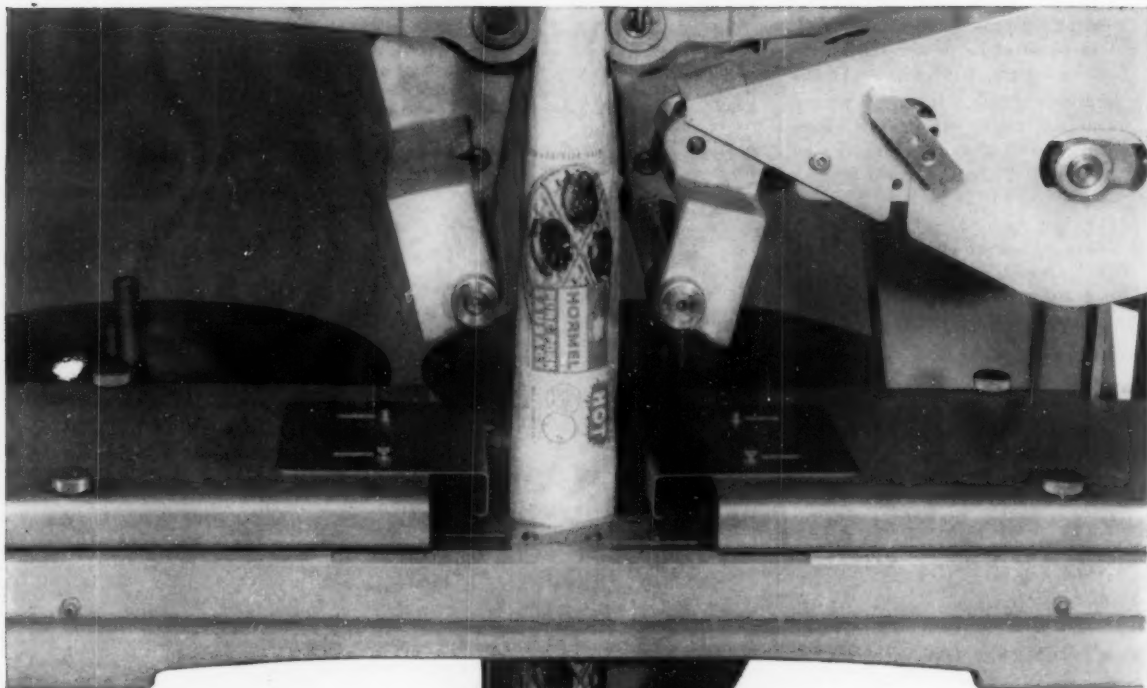
"A Clarke can is a compelling invitation to buy"

CLARKE CAN CO., INC., E. York & Thompson Sts., Philadelphia 25, Pa. GARfield 6-3370



**CC**  
CLARKE CAN  
OF  
PHILADELPHIA

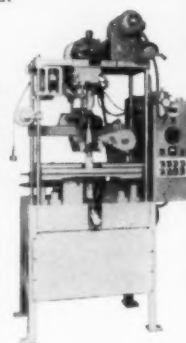




***If it can be squeezed,  
this closing  
can clip your costs***

Total cost of materials about \$4 or \$5 per thousand packages! Uses only 75 square inches of roll stock film and 1½ inches of coil wire for a one pound package ... with NO WASTE.

Occupying floor space only 3 ft. x 4 ft., the chub machine takes low-cost roll film and heat-seals it into a strong continuous tube. Tube fills automatically as it passes over end of mandril carrying the product.



Such is the amazing economy of the new improved KP Chub Machine ... the most efficient packaging unit ever offered for any semi-viscous product.

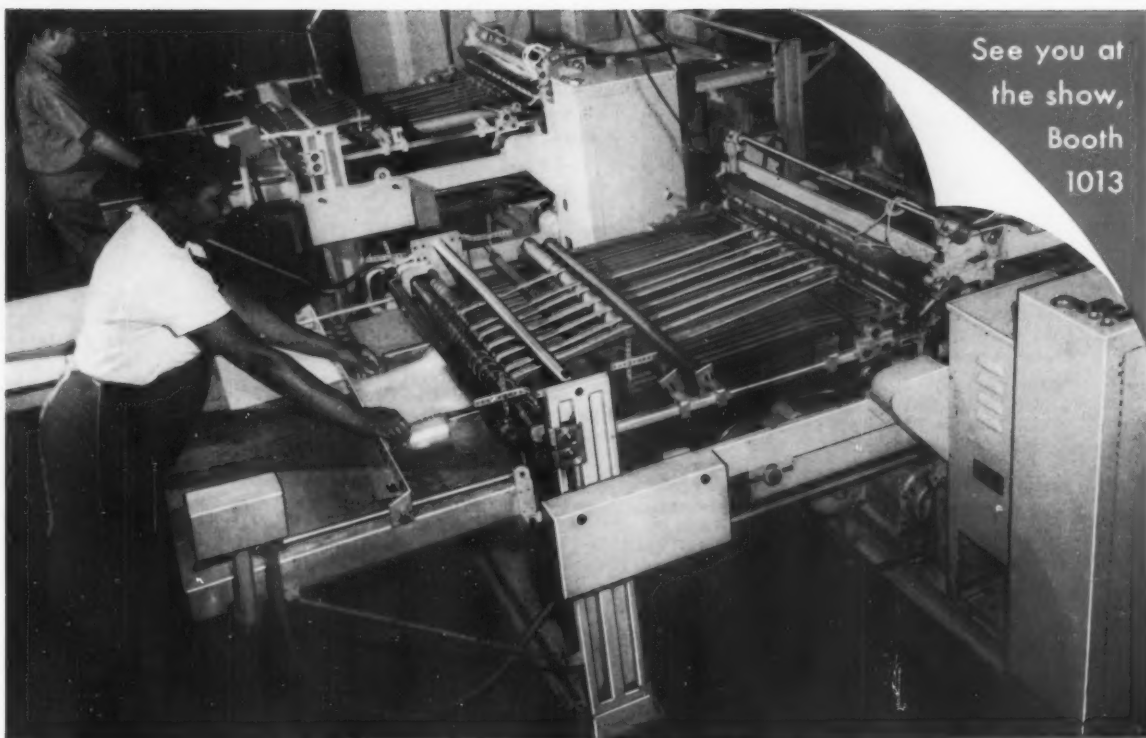
Electronic registry control "reads" the printed film to pinch off and close packages at proper point, simultaneously applying two clips made from low-cost coil wire. Completely automatic and fool-proof, with dependability proven over years of service and millions of uniform, skin-tight, clean, saleable packages.

Uses almost any film, printed or clear. Accurately meters 4 to 32 oz. packages, with capacity 2400 closings per hour. If you are packaging pork sausage, liver sausage, sandwich spread, cheeses, cookie or pie dough, cake frosting or similar products, a KP chub machine plan can improve product appearance and cut packaging costs. Let our representatives investigate this with you. Write today.

**KP**  
**THE KARTRIDG PAK CO.**

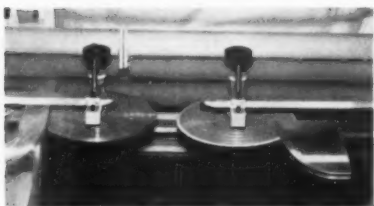
Dept. T, 1355 W. Second St., Davenport, Iowa, Telephone 3-2756





SCHJELDAHL BAG-MAKING MACHINES PHOTOGRAPHED AT COLONIAL ENVELOPE COMPANY, INC., BROOKLYN, N. Y.

**"We use Schjeldahl machines  
because they're fast and versatile!"**



**ADD A SCHJELDAHL GUSSETER** and meet customer demands for all types of plain and fancy gusseted bags. This large model gussets 1" to 6" and in-tucks 1/2" to 3". May be used singly or in pairs.

"We produce polyethylene bags of all styles and sizes at Colonial," plant manager Lester Goldstein reports. "So, we need versatile bag-making machines that give us fast changeovers and plenty of speed. From our experience and observations, we know that Schjeldahl is *best suited for us*."

Schjeldahl machines are fast, no doubt about it. Schjeldahl's model S-20T, the "Split Roll" machine, gives you up to 120 cycles per minute, produces 4 printed bags simultaneously with each cycle. You can run bags ranging in size from 3" x 3" to 40" x 70" in any shape desired out of 3/4 to 4 mil materials . . . sideweld or bottom seal.

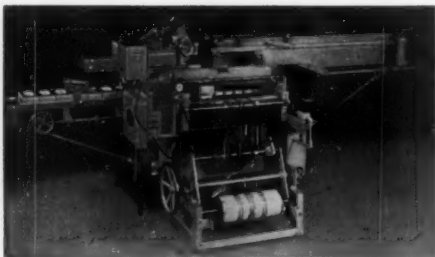
**NO OTHER MACHINE** can match Schjeldahl's versatility and production capacity. It will be a real money-maker for you too. Write, wire or call for the facts on Schjeldahl bag-making machines and complete line of attachments and accessories.



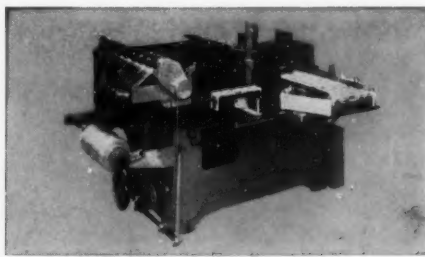
**Schjeldahl Company**  
Northfield, Minnesota

*Putting Tomorrow's Materials to Work Today*





**NOW YOU CAN HAVE TOMORROW'S OVERWRAPPING MACHINE TODAY!** Battle Creek's completely new Model 475 successfully handles more than 40 different formulations of soft plastic film . . . your assurance new plastic film developments will not outdate this machine. Change of films requires only electronic heat adjustment. Size changes are made in 15 minutes. Wraps up to 75 per minute within 5" to 12" lengths, 3" to 8½" widths and ¼" to 4" heights. Choose any of these films — polyethylene (medium, low and high density 1 mil and up), polystyrenes, heat sealing cellulose acetates, heat sealing foils, polyvinyl chlorides, cellophanes, polypropylenes or polymer coated films. Battle Creek "Continuous Flow" Packaging Machines, Inc., Battle Creek, Michigan.



**REDUCE COSTS...PROTECT PRODUCTS...IMPROVE DISPLAYS...PROMOTE MULTIPLE SALES** with Battle Creek's new Model 850 Automatic Bundler. This machine bundles groups of packages . . . 4, 6, 8, 12 and 24 to a bundle . . . at speeds up to 18 per minute. One operator can easily keep pace with a packaging line as high as 180 per minute. Depending on construction selected, the machine bundles with kraft paper, polyethylene, cellophane and other films; in bundles within 5" to 12" long, 4" to 10" wide and 1" to 8" high. Used for textiles, paper items, drugs, chemicals, cosmetics, food products . . . and/or what have you? Battle Creek "Continuous Flow" Packaging Machines, Inc., Battle Creek, Michigan.

# SIMCO'S "Midget"

## UNCONDITIONALLY

---

## GUARANTEED

---

## TO END STATIC

*in film converting and packaging machines!*

Simco engineers have given the go-ahead to guarantee—*unconditionally*—the end of all static problems, by the SIMCO "Midget". This safe, inexpensive static eliminator is effective on any type of material. Anti-static cleaning devices, anti-static sheet separators, anti-static sprays, and meters for measuring static are also available. Write today for full information.

**the SIMCO company**  
920 Walnut Street, Lansdale, Pa.



## F&DA loses test case on 'deceptive packaging'

A candy manufacturer accused of "deceptive packaging" by the Food & Drug Administration has been cleared by a U. S. District Court in a case of broad significance to many packagers. The case, said to represent the first such Government complaint in a decade, was carefully selected by F&DA to launch a new drive on packaging it considers misleading. At issue was the Delson Candy Co.'s 10-oz. package of thin mints that employs four hollow dividers to separate the candies into compartments designed, the company contended, to prevent breakage. F&DA admitted that the prod-

uct weight is correctly stated on the package, but argued that the space occupied by the candy is only 45% of the volume of the box, thereby deceiving the purchaser.

The judge, sitting in Newark, N.J., ruled on Feb. 10 that the Government had failed to prove that the package was misleading and found that the evidence was "overwhelmingly persuasive that the exigencies of machine filling, handling and shipping of separate pieces of candy in interstate commerce require that less than the total interior volume of the box . . . be occupied by the candies." •

## Sounding Board—question of the month

[Continued from page 99]

polyethylene plastic containers has caught the industry apparently unprepared. Many packaging-machine suppliers were reluctant to cope with the problems resulting from the different "behavior pattern" of the new plastic containers.

Plastic bottles are much lighter than glass bottles of the same size and shape, and consequently less stable. This approaches top-heaviness in the smaller sizes, because the molded neck for rigidity's sake contains a greater portion of the total mass from which the container is blow molded, thus raising the center of gravity higher than in a comparable glass bottle. The friction coefficient of polyethylene plastic differs from that of glass. This characteristic in conjunction with the low weight of the containers results in an undesirable ratio between guide-rail friction (too high) and bottom friction (too low). This impedes proper conveyor-belt travel.

Furthermore, the change from glass to plastic means exchanging a rigid container for a pliable and "top-pressure-sensitive" container. Machinery for automatic handling of small plastic containers is not yet readily available, because glass-handling machinery is just not as easily adapted for plastic application as it seemed at first.

From our own experience we learned that an extraordinary amount of development engineering and design time and effort has to be spent to create an automatic plastic-bottle assembling line that promises to be

a piece of workable machinery. As our development work progressed, it became abundantly clear that new packaging materials require new packaging machinery. As to the question, whether packaging-machine development keeps up with packaging materials development, the answer as we view it is: not so fast as we would like.



**William H. Drews**  
Packaging Coordinator,  
Black & Decker  
Mfg. Co.  
Baltimore

With the exception of wire stitchers, staplers and strapping machines, up to this year we have not used any of the packaging machinery which is so common in the food and drug industries. We have now purchased two heat-sealing machines for use with blister packaging and are currently studying the possibility of adding a pouch-making machine to our Packaging Department. While our requirements demanded that we obtain units readily adaptable to frequent change-over for a wide size variation, we had very little difficulty in locating equipment adequate for our needs and at a price within our means. In studies thus far into the procurement of a pouch-making machine, it would indicate that we should not have too great a difficulty in filling the same requirements.

Having formerly worked in the drug industry on packaging develop-

Packaging a  
**PREMIUM  
PRODUCT**  
for all its worth

through creative molding  
by Dillon-Beck's Design  
and Engineering Staff  
... specialists in producing  
pace-setting plastic packaging  
and molded parts.

**LIPKOTE**  
by COPPERTONE



Designed  
and produced  
to soothe more,  
sell more . . .  
threaded,  
rotating pin  
and cup  
precision-molded  
to raise and  
lower Lipkote  
as needed.



### ADDED ATTRACTION:

Flexible, easy-  
fitting polyethylene  
cap has personalized  
markings (O-Δ-☆-□)  
for individual  
identification.

Custom Produced  
by

**DILLON-BECK**

(Metal container by J. L. Clark)

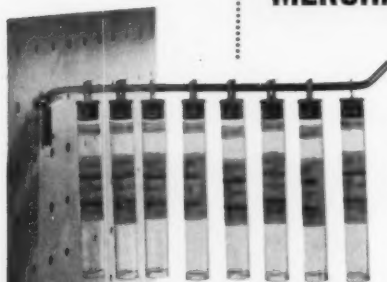
- ★ DESIGNS & MODELS
- ★ MOLD AND DIE CONSTRUCTION
- ★ MOLDING & ASSEMBLY  
of THERMOPLASTICS  
RANGING from 1 to 16 ozs.

Inquiries Invited

**DILLON-BECK**  
MANUFACTURING CO.  
Designers • Molders • Producers  
of Purposeful Plastic Products  
1227 CENTRAL AVENUE  
HILLSIDE, NEW JERSEY



Visibility  
**NEW**  
Sales Appeal



# HANG-UP PLUG\*

for Peg-Board Type  
MERCHANDISING DISPLAYS

Positive hold  
Snap-on closure

Novel, attractive—designed for hang-up displays. New Flex Plug easily snaps-on, twists-off, has positive hold. Hang-up Flex containers with these plugs available in selected diameters any lengths, plain or decorated. Transparent, decorative, reusable, odorless, shatter-proof. Ideal for such things as cosmetics, notions—or hardware, small tools, precision, electronic or machine parts. Increases sales appeal.

**Flex**

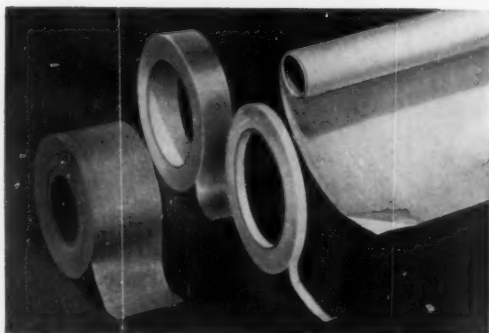
Write today for free samples.

**PRODUCTS CORPORATION**

\*Patent Pending

231E MEADOW ROAD (RTE. 17) RUTHERFORD, N. J.

OTHER FLEX CONTAINERS AND VIALS made of Crystal-clear cellulose acetate, available in 10 stock diameters from 1/4" to 1 3/4". Plain or decorated. Polyethylene plugs, metal screw closures, or metal snap caps.



# NEW IN TEFLON\*

For Heat Sealing  
& Packaging

**"TEFLON" BELTS**—the newest thing for belt sealing.

Endless welded types up to 18" wide, any length.

**"SLIP-STIK"**—Teflon tapes with hi-temp. adhesive.

Made in several widths and thicknesses.

Ideal for facing heat seal bars.

Sticks to any surface.

**"KORDA-FLEX"**—Teflon coated glass fabric. Strong—light-weight—resists burning—releases polyethylene and all packaging films.

Write for further information on "Teflon" for heat sealing and packaging.

\*DuPont T.M.

**CHICAGO  
GASKET  
COMPANY**

1273 W. North Avenue  
Chicago 22, Illinois.

TEN YEARS' SUPPLYING "TEFLON" PRODUCTS TO THE PACKAGING INDUSTRY

ment, I have tried to keep somewhat abreast of package-machinery innovations. It appears to me that two things have greatly contributed to the rapid advancement of packaging machinery which allows me to answer this question with an unqualified affirmative. These contributing factors are:

1. The apparent close cooperation between the research laboratories of the many package-material suppliers and the package-machinery manufacturers.

2. The amount of competition in the field of packaging machinery that would soon eliminate any manufacturer not keeping up with industry requirements.

Along with the above two reasons for my favorable impression of packaging-machinery manufacturers, I also feel that a good job has been done by the manufacturers in recognizing the need for flexibility and versatility in their equipment. While this is indicative of good "market sense," it also places a greater demand on the machinery design engineers who, on the whole, have met this challenge admirably. ●

## Blister sealing

[Continued from page 189]

Bishop, which seals a lipstick and a full-color-printed display card between a thermoformed front piece and a flat back piece of transparent acetate, the new package was adopted to discourage pilferage as well as to upgrade the appearance of the product.

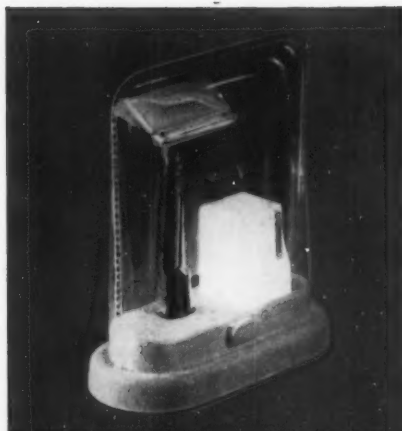
In all cases, blisters and contents are assembled manually in specially designed trays which are transferred on a turntable to the sealing die.

After being sealed, the multiple-sealed packages are separated by specially designed steel-rule dies in punch presses, completing the packaging operation.

The method, of course, is economical only when production runs are of sufficient volume to amortize costs of custom-made dies, since each package demands its special forms for blisters and sealing dies. Originators of the technique and suppliers of the electronic equipment say that the pattern of the interrupted seal is not limited to the eighth-inch spacing presently used, but could be varied in design according to preference. ●



# SIX SUCCESS PACKAGES ALL PRESSURE-FORMED by PLAXALL



◀ **GEM'S** new push button razor stands upright—fully visible from all sides—a dramatic **SHOWPLAX** package with crystal clear dome and flocked plastic base.



▶ **JOHNSON AND JOHNSON** packs its dental floss quickly, economically in a **SNAPLAX**—Plaxall's double undercut blister which snaps onto a diecut card—no sealing, no adhesives, no staples, no double cards.

◀ **GENERAL ELECTRIC'S** portable food mixer is vividly displayed, yet fully protected, in beautifully contoured cellulose acetate **COVERPLAX**.

▶ **YALE AND TOWNE'S** line of fine padlocks is now packaged in Plaxall's **BLISTERPLAX**—a butyrate blister pressure-formed for unusual uniformity and strength, and heat sealed onto a display card.

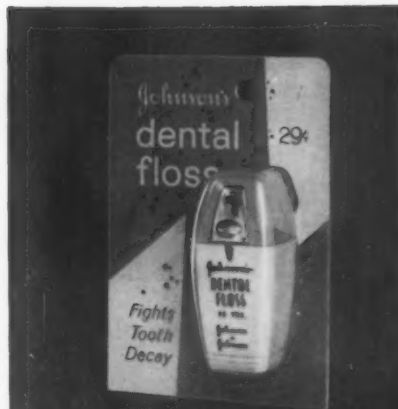


◀ **STERLING DRUG, d-CON** Division, distributes millions of formed **TRAYPLAX** as rodent bait stations—trays are pressure-formed, trimmed and stacked automatically with the precision and accuracy of metal stamping.

▶ **WESTINGHOUSE** selected Plaxall's versatile **SLIDEPLAX** to display and dispense their automotive bulbs—achieving visibility, accessibility and protection—at low cost.

for **ECONOMICAL  
PLASTIC PACKAGES**  
that will sell  
your product

CALL



THE WORLD'S LARGEST PRODUCERS OF  
THERMO FORMED PRODUCTS AND PACKAGES

OVER TWENTY YEARS OF FORMING EXPERIENCE  
COUPLED WITH HIGH SPEED PRECISION  
EQUIPMENT ASSURES QUALITY PRODUCTION

# PLAXALL INC.

LONG ISLAND CITY 1, NEW YORK—TELEPHONE STILLWELL 4-4800

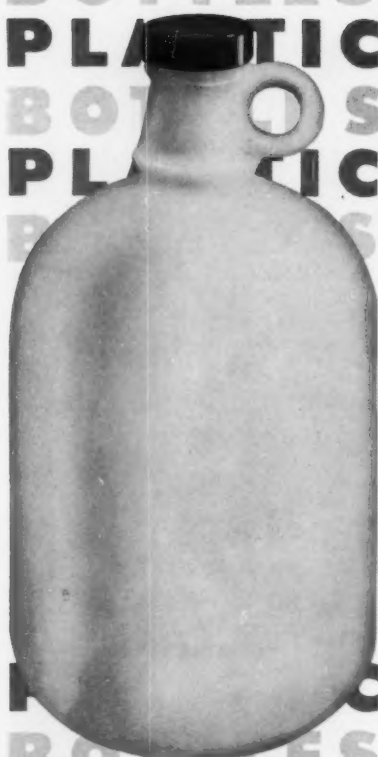
Plaxall, Inc. operates under patents owned and licensed by Design Center, Inc., Long Island City 1, N.Y.

9-257



## STOCK AND CUSTOM

PLASTIC  
BOTTLES  
PLASTIC  
BOTTLES  
PLASTIC  
BOTTLES



**Superior  
service  
to small  
and large  
users.**



*Inquiries invited from bottle  
wholesalers and sales repre-  
sentatives.*

PLASTIC BOTTLE DIVISION OF  
**Vantines, Inc.**  
(Since 1866)  
Flushing 54, N. Y. • LE 9-3000

## Flexographic-printing award winners

Consumer packages walked off with four of the eight top awards presented by the Flexographic Technical Assn. in its first annual Awards Competition. The presentations, to



*Two First Awards were won by this Sealtest carton in FTA competition.*

companies which produced the winning entries, were made at a luncheon on Feb. 5, as a highlight of FTA's second annual Meeting & Technical Forum.

Some 200 entries were submitted in the flexigraphic-printing competition, which was divided into four

classifications: film, foil, paper and paperboard. Two First Awards were presented in each of these categories. One award was given for technical achievement in the package; the other was presented for pictorial excellence.

The only entry to win two First Awards in any category was National Dairy Products' Sealtest milk carton, which was entered in the paperboard classification. The awards were presented to the producer of the carton, International Paper Co., New York.

In the competition's film classification, a First Award for pictorial excellence was won by Lassiter Corp., New York, for Burlington Mills' Bur-Mil Cameo hosiery package. Wrapture, Inc., Flushing, N. Y., won a First Award for pictorial excellence in the foil classification of the FTA competition. The package was Kapp Records' foil-laminated album jacket for "Silent Night," a long-playing stereophonic phonograph record of Christmas songs. ●

## A better boil-in bag

[Continued from page 169]

blanks from the magazine, set up and feed them on to the carton conveyor, which is synchronized with the product conveyor. Carton feed is controlled by a no-product-no-carton electric switch.

Pusher bars mounted on an endless chain thrust the product into the carton. After side flaps are plowed closed, hooked tucker bars close the trailing flaps. A specially designed spiked wheel—called a "lock pre-breaker disk"—on either side of the channel prepares the anchor lock by forcing the small wings on the flange slightly downward. The flange is then directed into the curved slit on the main flap. The channel then narrows to exert firm control on both ends of the carton, a cam wheel gives a final pressure to each anchor lock and slit lock, and the completed carton is ejected onto a table for packing into shipping containers.

For the time being, Sara Lee is filling and sealing its bags on semi-automatic equipment. Speed is only about 30 units per minute at present, but the company expects to invest in automatic equipment as national dis-

tribution of the products is achieved.

Sara Lee believes its smaller carton size (5¼ in. square by 7/8 in. deep) makes it clear that this is a single serving. The company has also found that the smaller carton tends to get more facings in supermarket freezer cabinets and lowers out-of-stock incidence. This is particularly important on busy days when supermarkets are crowded and restocking less convenient.

The graphic design selected for the Sara Lee package is very similar to that adopted last year for Sara Lee baked goods. A rose-cerise background color, distinctive white Sara Lee logotype and field of polka-dot-like stars have been slightly modified to suit. A pale blue copy ribbon has also been retained to suggest purity and freshness and to carry a brief selling message on ease of preparation. Product illustrations are reproduced by fine-screen lithography.

The back of the carton is newly designed, since the bottom portion of all cake packages is a plain foil pan and so could not be used as a guide. Chicken Sara Lee copy stresses qual-





Other package designs fabricated from acetate sheeting by J. E. Plastics Manufacturing Corporation, 1780 Broadway, New York 19, N. Y. Their colorful catalogue of packaging ideas will be sent on request.



Sift-proof Crystal Container with pouring fitment and locked-in bottom disc.

Crystal Containers with removable friction-fitted top and locked-in bottom disc.

Package for leading brush manufacturer displayed by Mr. Herbert Magnes, President of J. E. Plastics Manufacturing Corp.

## "J. E. Plastics uses Celanese Acetate sheeting to fabricate new, sift-proof *Crystal*\* Containers"

"Our new Crystal Containers are a 'natural' for packaging products, both permanently locked-in or removable. The packages are sift-proof and pour easily," says Mr. Herbert Magnes. "We use acetate because of its sparkling, crystal-clear transparency. Acetate provides maximum visibility, assures strong and rigid cylindrical walls, and takes clear, sharp printing with transparent or opaque colors. Most importantly, it is economical—the cost of Crystal Containers is actually lower than any comparable package on the market."

Acetate makes possible the unique J-E method of fabricating Crystal Containers without using any cement or adhesive. For packaging popular priced products: bath salts, face

powders, crystals, capsules, pills, etc., these sift-proof transparent acetate containers are ideal. J. E. Crystal Containers with other types of locked-in or removable tops, are the choice for packaging various products—from baby clothes to bobby pins, from cosmetics to hardware, etc. Acetate sheeting can be thermoformed using automatic machinery to achieve high rates of forming, filling and sealing. For information on the properties and thermoforming of acetate sheet and film, write to: Celanese Plastics Company, a Division of Celanese Corporation of America, 744 Broad Street, Newark 2, N.J.

Celanese® \*Patent Pending

Canadian Affiliate: Canadian Chemical Company Limited, Montreal, Toronto, Vancouver  
Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16.

Acetate... a *Celanese* packaging plastic





# FOILED AGAIN!

...BUT NOT WITH COMPLETELY NEW

## *Wondersheen!*

The newest packaging development to be introduced to the industry is Wondersheen, a paper developed by Hartford City Paper Div. It has the appearance of foil, with even more protective advantages than offered by glassine paper. This new concept in packaging has been tested and proved under the toughest packaging tests.

Complete information and samples are available upon request. Write today!



**Hartford City Paper Division**  
Minnesota Mining & Manufacturing Co.  
Hartford City, Indiana

ity ingredients and careful preparation, and is circled with a colorful border of product ingredients. The bottom of the back panel gives heating instructions. Sara Lee expects to bring out soon a small booklet of serving suggestions either for inclusion in the package or on a tear-off pad at the freezer cabinet.

The carton's side panels are used to merchandise Sara Lee baked products. Since these are so strongly established throughout the country, it's believed that small illustrations of the cakes will create an "I've-bought-that" feeling and greater confidence in first-time buyers of the chicken product.

Sara Lee and its advertising agency, Cunningham & Walsh, cooperated on design decisions.

Sara Lee is counting heavily on its package to help secure a niche for this new product line in an already hotly competitive field. ●

### Formable paper-plastic

[Continued from page 214]

laminating and heat-sealing temperatures are those that would be used for each specific plastic. Since all these temperatures are well below the char point of kraft, there are no heating problems in using already-established processes and techniques.

The resistance to removal of the residual stretch in the new X-Crepe is somewhat higher than that of the various plastics.

Consequently, the forming pressures that are required for the new combinations are slightly higher than those required for plastic alone and they depend largely on the shape of the piece desired and the thickness of the material. Normal laminating and forming conditions are described in Table I.

Forming may be done on mechanical, hydraulic or air-pressure presses using male, female or matched dies. Multiple-cavity molds may be used. Some pieces, using the lighter-gauge grades, have been formed on vacuum-forming machines with plug assists. Generally speaking, vacuum pressure is insufficient unless the draw is shallow with generous radii. However, pressures required to form are not high, ranging from 80 to 350 p.s.i. for all pieces made to date. Molds required are usually very expensive. The usual method has



**THE  
MOST  
COMPLETE  
LINE  
OF  
UNSCRAMBLERS!**

Send for free catalog of The Complete Styl-O-Matic Line plus information on any of the products listed in this advertisement.

*Styl-O-Matic*  
**ROTARY UNSCRAMBLER**



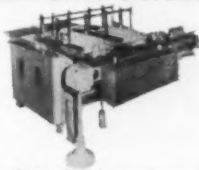
Cartons of round bottles, jars, cans or containers are inverted onto the tilt-top table. Contents are pushed onto revolving disk and automatically dispatched in single file to the conveyor. Also available with pallet feed for anti-biotic containers.

*Styl-O-Matic*  
**STRAIGHTLINE UNSCRAMBLER**



Cartons or cases of bottles, jars, cans or containers dumped onto table are instantly unscrambled and regimented into a single file to keep a continuous flow of units on your production line.

*Styl-O-Matic High Speed*  
**WALKIE-PUSHIE UNSCRAMBLER**



Accommodates almost any size or shape container at speeds up to 400-450 per minute. Bottles, jars, cans or containers are unscrambled without agitation, and no scuffing or contact when discharging. High speed, very gentle handling is assured. Available also in twin units.

*Styl-O-Matic*  
**SURGE TABLE**



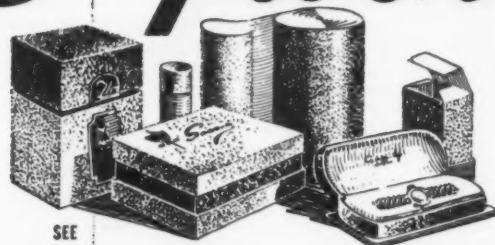
An accumulating table that is placed at a point in the conveyor production line to receive and hold round bottles, jars, cans or containers when succeeding equipment is momentarily shutdown.

**ISLAND EQUIPMENT CORP.** Dept. MP1 • P.O. Box 380276 • Miami 38, Florida

**CLAREMONT**

*The Packaging  
Industry's  
Magic Carpet!*

**Flock**

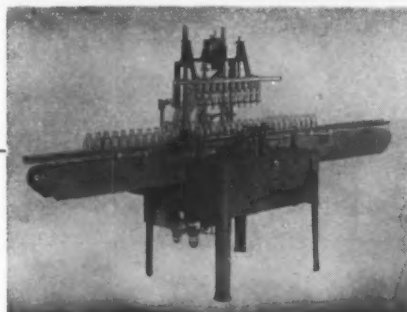


SEE  
YOUR  
PAPER  
MERCHANT  
FOR:  
Flock-Affixed  
Papers  
...IN ROLLS  
Boxboard  
...IN SHEETS  
(18 brilliant colors)

—Claremont Flock... those tiny clipped-lengths of luxurious cotton and regal rayon. We market this irresistible outer raiment in bulk to paper processors, product manufacturers, packaging specialists and display builders who, for dramatic enrichment, apply it to paper, glass, metal, cork, plaster and similar materials.

Flock is a fascinating stimulant—and for pennies, an ounce adds a pound of allure. Check your suppliers—or, for complete information, feel free to contact us direct.

**CLAREMONT FLOCK CORPORATION**  
The Country's Largest Manufacturer of FLOCK  
CLAREMONT, NEW HAMPSHIRE



**FASTER FILLING  
FOAMLESS • DRIPLESS  
FASTEST CHANGEOVER  
(NO EXTRA CHANGEOVER PARTS REQUIRED)**

**PERL FILLING MACHINES**

For Vacuum, Gravity, or Combination of Both  
Hand Operated, Semi-Automatic, Fully Automatic

**FOR ANY PRODUCTION NEED**

Fill all kinds (glass, metal, plastic, etc.), size, shape  
containers up to 5 gallons.

**NEW! 6 SPOUT PORTABLE FILLER**

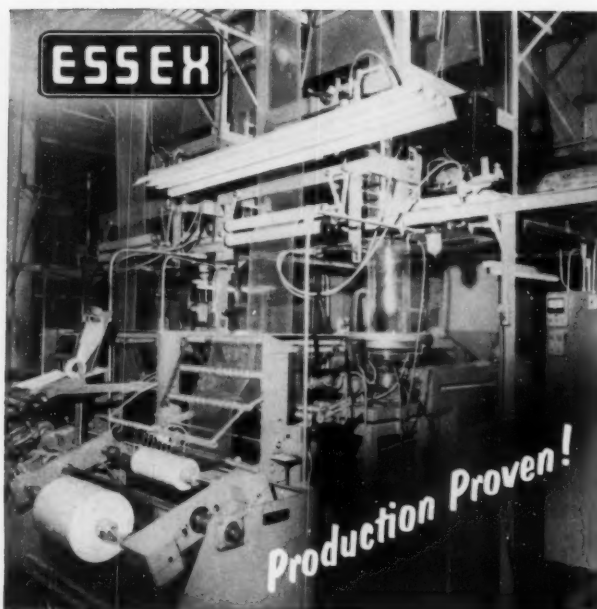
For Gravity, Vacuum or Combination Vacuum-Gravity.  
As Low as \$390.00 F. O. B. Factory. Write For Details  
Today.

**BOTTLE CLEANING EQUIPMENT**  
Write for Literature



**PERL MACHINE MFG. CO., INC.**  
68 Jay Street, Brooklyn 1, N. Y., MAIn 4-0165





Extruders

Blown Film  
Systems

Dies

Takeoffs

Auxiliary  
Equipment

Special  
Designs

A complete blown film installation available as a package unit.



Write, wire or call

**PLASTIC MACHINERY CO., INC.**

58 Rantoul Street, Beverly, Massachusetts

only  
**FAUSTEL DRYERS**  
offer...

### EXCLUSIVE WEB TEMPERATURE CONTROL

- Accurate temperature control of the WEB itself ... to plus or minus one degree ... with Minneapolis-Honeywell Elektronik Potentiometer!
- Set the web temperature needed and forget it ... speed ups or slow downs compensated for AUTOMATICALLY!
- A proper, accurately held temperature will not dry out stock.
- Faustel's exclusive web temperature control system obsoletes inefficient oven air temperature control methods ... assures higher production, less waste, and finest quality.

### TOP DRYING EFFICIENCY

Faustel between-color drier and after ovens utilize engineered blast tubes, which assure equal air distribution across the web. Shutters allow either high velocity air for drying cellophane or paper or high volume low velocity air for drying Poly without flutter or stretch.

Faustel ovens are engineered to the fact that volume air movement with moderate air temperature produces perfect drying conditions without wasteful baking.

Complete details are available by writing.



**FAUSTEL ENGINEERING, Inc.**

5109-B North 125th Street • BUTLER, WISCONSIN  
(Suburb of Milwaukee)

FAUSTEL ALSO DESIGNS AND MANUFACTURES BAG MACHINES, FLEXOGRAPHIC AND ROTOGRAVURE PRESSES, LAMINATORS, AND GENERAL CONVERTING OR SPECIAL MACHINERY

been to make metal-filled epoxy dies from plaster casts.

The lightest weight and thinnest grades are made from one ply of lightweight X-Crepe combined with a thin film of coated or laminated plastic, from 0.010 to 0.030 in. caliper, and then range upward in thickness to 1/4 in. or more.

The heavier and more-rigid grades are produced by alternating plies of X-Crepe with layers of coated or unsupported plastic film to achieve the thickness, rigidity and heft desired. Such "sandwiched" sheets can be supplied with colored or printed plastic on one or both sides, with paper exposed, in plain colors, printed or flocked, or surfaced with transparent plastics.

The physical-property chart, Table II, shows physical-strength properties of four representative grades of the new combined paper-plastic product. These properties can be varied, almost without limitation, by changing the ratio of paper to plastic, alternating other X-Crepe grades, using other plastics and varying thicknesses of plastic and by increasing or decreasing the number of plies of X-Crepe and plastic. The chemical and protective qualities of the new laminate are those of the plastic and the amount used.

Costs can only be approximated, on the basis of the present laboratory work. But it appears that the X-Crepe-polystyrene materials listed in Table II should run about 35 to 40 cents a pound. A typical X-Crepe coated with 4 mils of polystyrene would cost about \$27.50 to \$30 per 1,000 square feet. X-Crepe, eight plies, laminated with 2 mils of polystyrene, seven layers, is estimated at \$190 to \$200 per 1,000 square feet.

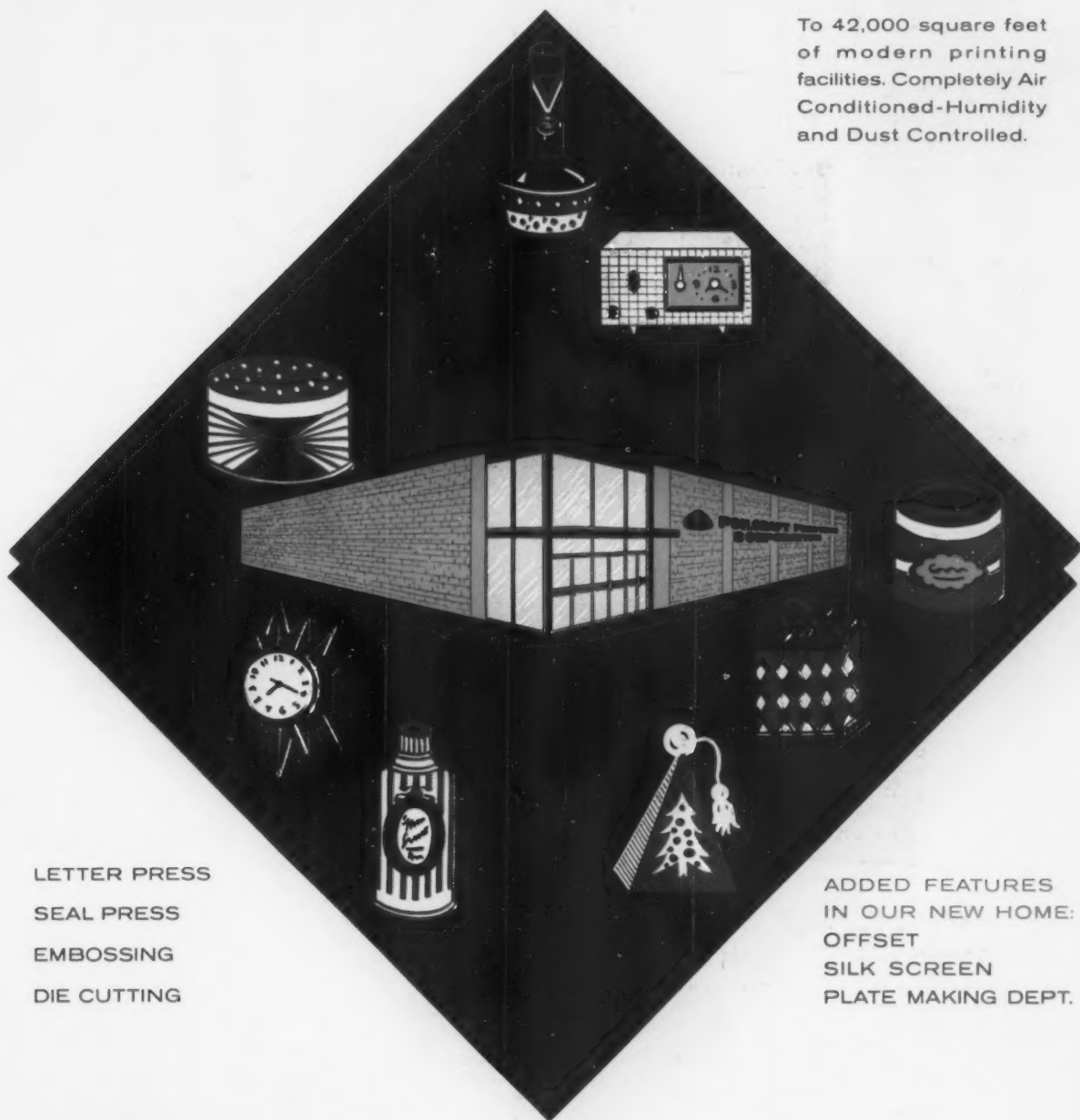
Design and color range is limited only by the colors, designs and printed patterns that can be supplied in plastics and paper. This wide range of decorative effects, coupled with the unlimited thickness range, makes it possible to design packages from eye appealing to practical, from display to protective, from light duty to heavy duty, from single use to continuing use, all in light weight and at low cost.

These materials are now available to fabricators and the packaging industry in production quantities. Research and development is continuing and many new product variations and techniques are expected. ●



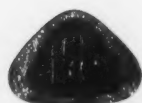
# ✓ Our Move...

To 42,000 square feet  
of modern printing  
facilities. Completely Air  
Conditioned-Humidity  
and Dust Controlled.



LETTER PRESS  
SEAL PRESS  
EMBOSSING  
DIE CUTTING

ADDED FEATURES  
IN OUR NEW HOME:  
OFFSET  
SILK SCREEN  
PLATE MAKING DEPT.



## FOILCRAFT PRINTING CORPORATION

45 CHERRY VALLEY ROAD  
WEST HEMPSTEAD, L. I., N. Y.  
IVanhoe 5-1550

NEW YORK SALES AND ART DEPT.  
124 EAST 40th STREET  
NEW YORK 17, N. Y.  
OXford 7-8390

CINN., OHIO SALES OFFICE  
ROSELAWN CENTER BLDG.  
CINN., OHIO  
MEIrose 1-8963

PRINTED FROM "DYCRIL" PLATES







## Flexible packagers' session

Marking the 10th anniversary of its formation, the National Flexible Packaging Assn. at its recent annual meeting in New York looked at the problems of the '60s by reviewing current achievements and the challenges ahead. The four-day sessions covered general subjects, supplier reports, military packaging and association business.

Education for packaging was highlighted by H. G. Walter, executive director of the Packaging Foundation, Michigan State University; the impact of the Food Additives Amendment was reported by Adolph Miller of Milprint; the future of flexible polyethylene packaging was analyzed by J. L. Rodgers of Union Carbide Plastics; a new polymorphous polyethylene was described by Dr. George E. Ham of Spencer Chemical, and automatic packaging with polyethylene was covered by Larry Dowd of U. S. Industrial Chemicals.

NFPA authorized an appeal to Congress and the Administration for a moratorium on the effective date of the Food Additives Amendment and at its annual banquet presented

a scroll to Roy E. Hanson of Milprint for his long services to the flexible packaging industry.

The association's 1960 officers include E. S. Elgin, Chase Bag Co., president; H. N. Brush, The Munson Bag Co., executive vice president; E. F. Burke, Standard Packaging Corp., treasurer; John M. Cowan, secretary and managing director, plus the following division vice presidents: Mr. Hanson, paper and household products; Lewis Hart, Boyertown Packaging Service Corp., converted films and foils, and A. E. Sloan of the Rap-In-Wax Paper Co., industrial and specification products division.

Division chairmen are T. W. Welles, Moser Bag & Paper Co.; F. W. Kiendl, Arkell & Smiths; Fred S. Hinkle, Continental Can's Flexible Packaging Div.; Carl F. Foster, Nashua Corp.; Leonard E. Canno, Equitable Paper Bag Co.; John V. Shea, Lassiter Corp.; Glenn E. Carter, Reynolds Metals Co.; R. S. Jones, The Dobeckmun Co.; A. E. Gerken, H. P. Smith Paper Co., and Stanton M. Weiss, Protective Coatings Corp. ●

## Polyester pouch for pigments

[Continued from page 155]

switched as necessary to suit the viscosity of the product.

To prevent the heavy product from sagging through the hot, soft heat seals on the bottom of the pouches, an air-jet cooling system has been installed under the flat-die heat sealers.

The two pumps that supply the four heads on each machine contain special adjustable by-passes that serve as return lines to eliminate another source of back pressure. Each pump discharges a double charge of product into a distributing chamber, which splits the flow equally between two filling heads. New air-actuated diaphragm clutches and spring-loaded brakes on the product pump give fast and positive start-stop action and are the secret of close filling accuracy. Changes in filling volume can be made by simply adjusting the degree of travel in the clutch. Though package width is fixed by the size of the sealing dies, length is easily adjusted by varying the stroke of the sealing

column to create packages with different capacities.

Finished pouches are loaded into locking cartons that hold six pouches each; these are then packed in standard corrugated shipping cases. Previously used metal tubes were packed in individual cartons.

For short runs of custom-packed colorants, Bennett's imprints the film web with a simple marking device. But for volume products, the film is printed and rewound on a compact flexographic press. One color is used for both the surface design and an identifying product code number on the back panel of the pouch. In addition to obvious economies, the in-plant printing system reduces materials inventory and makes the packaging operation more flexible.

This controlled technique for handling products of high and variable viscosity represents an innovation in economical control of fill for liquid pouch packaging and should have wide application to many food and chemical products. ●

# DYN



## contract packaging

We combine skilled hands, knowledge and experience, with the most modern equipment . . . to give you swift, dependable service . . . in packaging and despatching your products . . . at lowest possible cost.

We'll evaluate your needs . . . single, special job, sampling, or full production. We offer latest features for unit-packaging of tablets, capsules, powders . . . small and medium-sized pieces on any type heat-sealable films. Let us show you how we can save you money, problems and headaches.

assembling  
collating  
inserting  
glueing  
heat-sealing  
strip packaging  
blister packaging  
filling  
bag forming  
crimping  
folding  
stapling  
carding  
wrapping  
eye-letting

sealing  
assorting  
bundling  
packaging  
boxing  
labeling  
winding  
sorting  
mailing

# DYN

## CORPORATION

DYN Building (15 min. from Times Square)

285 Palisade Ave., Cliffside Park, New Jersey

Telephones: N.Y.C. LOngacre 4-9335  
N.J.: WHitney 5-4020





# **IMPULSE PACKAGING**

with the  
selling power  
of clean, clear  
Du Pont  
cellophane





**Did you know that 70% of all supermarket buying decisions are made in the store?** And surveys show that the products that *look* best . . . *sell* best. That's an important reason why many chip manufacturers and other smart packagers specify Du Pont cellophane. Its sparkling transparency really triggers the buying impulse. It gives you maximum visibility . . . shows all your product's shape, color, texture. Stays clear and clean, because it's static-free! And no other material can top Du Pont cellophane for high-speed machine efficiency . . . precise protection . . . beautiful color printing . . . and versatility in package constructions.

**Are you packaging profitably?** Find out how you can profit by starting your package planning with one of Du Pont's over 100 types of cellophane. Ask your Du Pont Representative or Authorized Converter to help evaluate your special needs. Du Pont Co., Film Department, Wilmington 98, Del.



REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY

**DU PONT**  
cellophane



# LOOK TO FOR EVERY LIQUID FILLING NEED



## Most Versatile Multiple Filler

**MODEL B-49 STRAIGHTLINE VACUUM FILLER.** For liquids and semi-liquids. Fills 4 to 9 containers simultaneously; up to 50 small containers p.m. Lever engages and disengages filling stems, otherwise operation is automatic. Adjustable for all container heights up to 14"; miniature and standard bottle finishes, gallon F-style cans, wide mouth jars. Stainless steel is standard; plastic for filling special solutions on order. Discharge conveyor optional. For details, request "Bulletin B-49."



**U. S. SIPHON FILLER.** For all liquids, foamy products and products that do not permit agitation. Stainless steel tubes, Glass-lined tank. For all containers. Write for the "Siphon Bulletin."

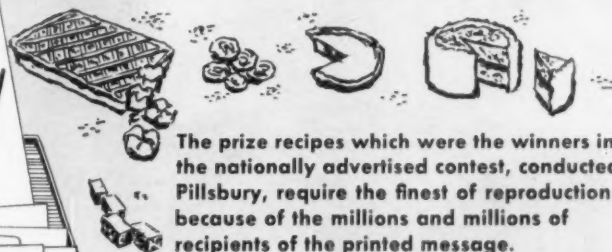
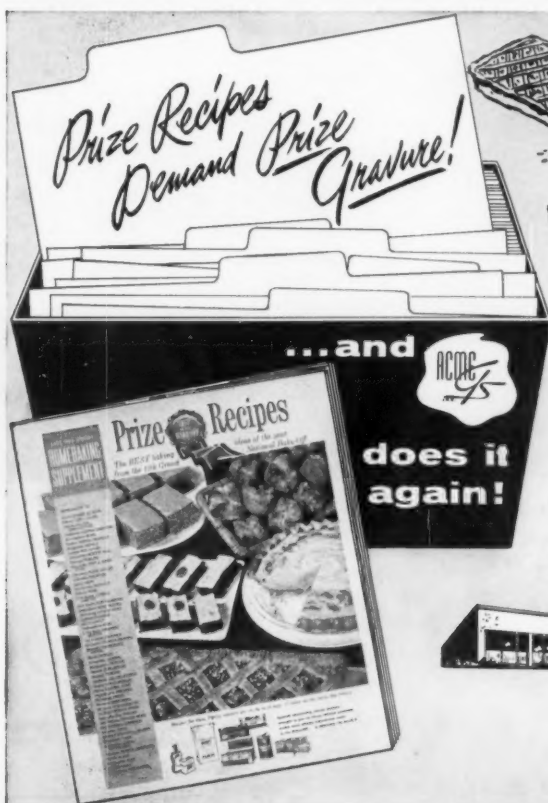
**U. S. HAND FILLER.** A precision unit of high quality for maximum efficiency. Write for "Hand Filler Bulletin."

**MODEL B-2 VACUUM FILLER.** Fills 2 containers while filled containers are being removed and empties loaded. Thus, operation is continuous. Handles containers up to 4 1/2" dia., 13" hi. Interchangeable stainless steel filling stems; plastic available on special order. Portable. Has cord and plug. Write for "Bulletin B-2."



## U. S. BOTTLERS MACHINERY COMPANY

PACKAGING ENGINEERS  
4017 N. ROCKWELL ST., CHICAGO 18, ILLINOIS  
BOSTON • NEW YORK • PHILADELPHIA • LOS ANGELES • SAN FRANCISCO • SEATTLE  
DENVER • PORTLAND, ORE. • KANSAS CITY • TUCSON • JACKSON, MISS. • ATLANTA  
MONTREAL • TORONTO • VANCOUVER • WINNIPEG • SANTIAGO • SAO PAULO • HONOLULU



The prize recipes which were the winners in the nationally advertised contest, conducted by Pillsbury, require the finest of reproduction because of the millions and millions of recipients of the printed message.

The process selected was Gravure, unequalled for its appeal and fine quality. The positives were by Acme. These, too, are known for their fine quality which will lead to the most perfect color reproduction possible.

Our cylinders are ideal for packaging of all types, for foils, cellophane, plastics, and paper board products. Our preprints, too, are just what you will need to bring out the finest details of your products.

If It's Quality . . . If It's Delivery . . . It's acme



**acme**  
**gravure services, inc.**

4001 Industrial Avenue Rolling Meadows, Ill.  
Phone: Clearbrook 5-0200



## Plastics engineers' packaging meeting

Advances in polyethylene wrapping machines and thin-wall formed polystyrene containers and significant new tests for polyethylene printability were discussed at the recent Society of Plastics Engineers' 16th annual technical conference, Chicago. Here are summaries of each talk:

*The desired properties of polyethylene for machine overwrapping*, by Boyd H. Redner, Jr., of Battle Creek Packaging Machines. For high-speed overwrappers, the presence or absence of slip agents is critical, Mr. Redner said. In selecting a film, Mr. Redner urged packagers to analyze these five factors: (1) product weight, (2) stiffness of film, (3) slip characteristics of the product, (4) film gauge and (5) extrusion method.

On high-speed overwrappers, too much slip gives an unsatisfactorily loose wrap. With medium-density film, a 0.4 to 0.6 coefficient of friction is generally best for most products. Inconsistent gauge gives poor sealing characteristics and even the new tension controls now being added to overwrappers cannot solve gauge-control problems completely.

*Design and production considerations for thin-wall formed containers*, by J. R. Lynch of Dow's Plastics Technical Service. Hot-drink cups for dispensing machines have been the first major entry in this field. Widespread adoption of thin-wall plastic containers for packaging has been held back in the U. S. by the lower cost of paper containers, but properly designed thin-wall containers are now picking up steam in the U. S. as their price becomes more favorable. Mr. Lynch said that Dow and others are "working assiduously" to obtain F&DA acceptance for high-impact polystyrene.

*A new test for polyethylene printability—the inclining platform tester*, by T. F. McLaughlin, Jr., of Du Pont. This simple new tester consists of an inclining platform, a supporting arm and an indicator dial at the side. A small syringe dispenses uniform-sized drops of distilled water on a film sample. The film's affinity for liquid (and therefore ink or glue) can be determined by the contact angle formed between the surface and the drop of water resting on it. ●

## Showdown in Washington

[Continued from page 161]

F&DA attaches to this is shown by the fact that the head of the Department of Health, Education & Welfare, Secretary Arthur S. Flemming, appeared personally before the House committee in January.

Secretary Flemming cited packaging specifically as a problem area under the new amendment, criticized some industries for not cooperating with either their customers or the F&DA on clearance data and said that if F&DA should decide that more time was necessary for orderly enforcement, it would request Congress to act.

Privately, it was felt that Secretary Flemming did not want to be in the position of asking for a delay, but would probably not oppose it if the move came from other sources.

The 1958 amendment provided for specific clearance of food additives or migrants on petition to the F&DA prior to the March 6 deadline and also empowered the Secretary to grant extensions of one year where testing was started but could not be

completed in time. The machinery for this, on an individual-item basis, appeared to have bogged down.

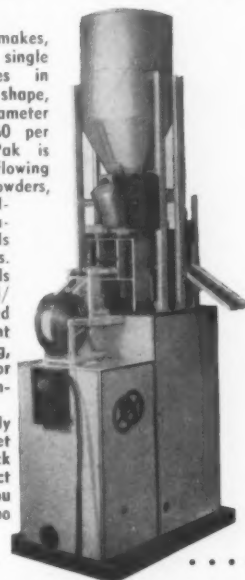
Secretary Fleming admitted to the House committee in late January that, as of that date, only one out of 34 requests for extended testing had been processed and approved. This section established an interim tolerance for the use of carbon black, a pigment. He said that 36 petitions for clearance of specific additives were then under consideration and that 41 other petitions were rejected mainly because they did not provide adequate test provisions for enforcement of tolerances. He conceded that F&DA had a file of 415 unanswered "letters" that had accumulated during the months of December and January.

As of this writing, the best advice that MODERN PACKAGING can give to food packagers and interested suppliers is to keep in touch with their Congressmen and watch their newspapers. A conclusive report will appear here next month. ●

# NEW

## AUTOMATIC UNI-PAK MACHINES

"Uni-Pak" makes, fills and seals single unit packages in "tear-drop" shape, from 3/4" diameter and up to 60 per minute. Uni-Pak is ideal for free flowing or auger-fed powders, granulars, pellets, and irregular shape solids in various sizes. Other models for larger and/or odd-shaped items. Excellent for food, drug, and — soft or hard good manufacturers. Uni-Pak is fully automatic! Let us sample-pack your product and send you literature, no obligation.



## AUTOMATIC HOLE PUNCH



Adaptable to existing machines. Unit jolts package contents to bottom of bag avoiding punch-damage to product. Conveyor or hand-fed models. Adjustable to various size packages, hole locations. Electric and air operated models. ALSO AVAILABLE—Labelling Attachments —Roll Feeds—Cut-Off Mech.—Adhesive Applying—Hopper Feeds—Assembly Machines —Heat Sealing Mech.—SPECIAL MACHINES. Tampon Machinery

## KETCHPEL ENGINEERING COMPANY

West Englewood, New Jersey  
TEaneck 7-4076



Foods and ..... Advertising Schemes

Jewelry

Pharmaceuticals

Electrical Components

Promotional and Gift Items

Hardware

Farrington custom packages are also ideal for Cosmetics, Religious Items, Smokers Accessories and Precision Instruments.

## Custom-made Display Boxes and Specialties by

**FARRINGTON**

Farrington provides a complete service ranging from research to mass production. We work with practically all products, and package with practically all materials, producing such packages as covered metal, covered metal and plastic, mandrel, molded plastic, vacuum-formed plastic and "P & S" type. All work is done in our own plant. All contact is through a single specialist assigned to you and your company. For a prompt, obligation-free suggestion or estimate, simply send us a description or sample of your product.

**FARRINGTON**

**PACKAGING CORPORATION**

Industrial Center / Needham Heights Branch, Boston 94, Massachusetts / Telephone: Hillcrest 4-5000



# CAMPCO PROGRESS

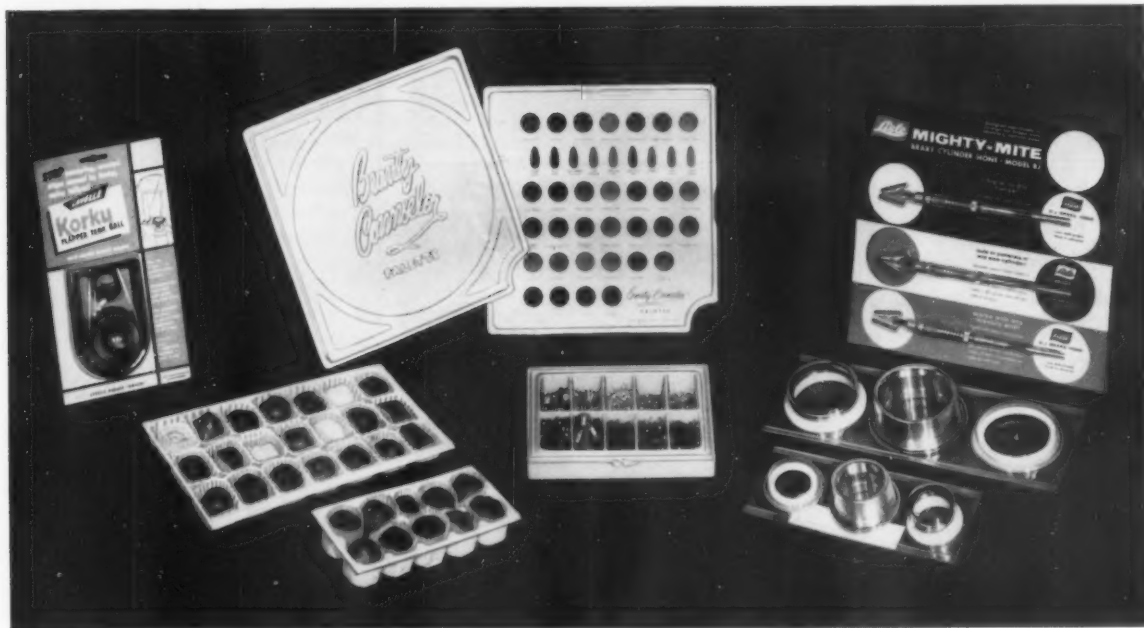
*latest developments in plastic  
sheet · film · fabrication*

## Quality Packaging Begins with CAMPCO Thermoplastic Sheet and Film BUTYRATE · ACETATE · STYRENE · POLYETHYLENE

Whatever the end use, the selling power of a package must rely upon the "hidden" qualities of the material from which it is made . . . strength, clarity, moisture-resistance, dimensional stability as dictated by the product.

To this end Campco has developed materials that can be depended upon to meet your packaging requirements in every respect. That's why it will be to your advantage to specify one of these Campco products: CAMPCO B-120 Cellulose Butyrate, in gauges from .005" to .125"

in transparent 22" wide stock sheets and rolls, also available in custom sheets and rolls. CAMPCO A-130 Cellulose Acetate in gauges from .005" to .060" in transparent, stock roll 22" wide, also custom sheets and rolls up to 48" wide; CAMPCO PE-200 Linear Polyethylene ranging from .020" to .250" in custom sheets, also rolls up to .050"; CAMPCO S-540 Rubber Modified Styrene available in translucent and opaque in gauges from .010" to .187" in custom sheets, stock sheets available in white opaque. Don't be satisfied with anything less. Specify CAMPCO.



### See interesting CAMPCO applications at the NPE

Be sure to visit the CAMPCO Booth, No. 1005, at the National Packaging Show. You'll see many outstanding applications utilizing CAMPCO thermoplastic materials. Included are case histories of applications in the packaging of industrial, consumer and pharmaceutical products, many of which are setting new "highs" in quality and appearance.

### Ask about the Package Designers Contest

Package Designers visiting the N P E are invited to participate in the "Design With Campco" contest being

held at the CAMPCO exhibit. Share your packaging problems with CAMPCO technical representatives on hand to discuss your needs.

### Received Your Campco Personal File?

This data-packed reference file on thermo-plastic sheet and film is yours on request—just send name and address on Company letterhead to Campco, 2717A Normandy Avenue, Chicago 35, Illinois.

**CAMPCO Sheet and Film**  
**a Division of Chicago Molded Products Corp.**



## DEPENDABLE has the machine you need for your . . .



Units for all types and sizes of containers—from vials to 55-gallon drums. Dependable Machines print on plastic, glass, ceramics, metal, etc.

### SCREEN PROCESS PRINTING

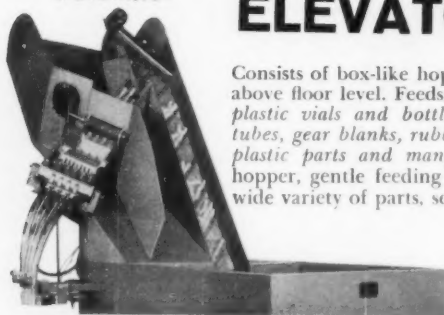


Units for flat printing on circuits, dials, flat bottles and F-style cans. Units for conical shaped objects. Write today for full details.

VISIT US AT THE NATIONAL PACKAGING SHOW, BOOTHS 1230 & 1232.

**SILK SCREEN DIVISION**  
**Dependable Compressor & Machine Co., Inc.**  
157 W. 21st St., New York 11, N.Y. • CHelsea 3-6717

A Diversity  
of Vertical  
Part Feeders  
& Counters!



## NEW! VERSATILE! ELEVATOR HOPPER

Consists of box-like hopper, with loading opening 3 feet above floor level. Feeds, orients and counts such items as plastic vials and bottles, bottle caps, cylinders, paper tubes, gear blanks, rubber cups, bushings, small cartons, plastic parts and many others. Provides large storage hopper, gentle feeding action to fragile parts, handling wide variety of parts, self-emptying, guaranteed performance, variable rate of speed.

## HOPPERMATIC

Also New Completely standardized, versatile high speed hopper fully adjustable for size and count, to handle endless variety of items such as screws, nuts, bolts, tokens, candies, bushings, molded parts, etc. Can be combined and timed with a press, turntable, wrapping machine, etc. Easily adaptable to short runs. Can feed up to 200,000 parts per hour. Gently handles delicate and fragile items. Satisfactory operation is guaranteed.

For Complete information, write:

**COUNT-O-MATIC division of  
U. S. ENGINEERING COMPANY**

MANUFACTURERS OF A FULL LINE OF FEEDING AND COUNTING MACHINES.



40-24 22ND STREET  
LONG ISLAND CITY 1, N.Y.

## Three overseas shows

April is packaging-show time in Europe as well as in the U.S.

Interpack, the International Packaging Exposition, will be held April 20-27 in Dusseldorf, Germany. In the same city, European Packaging Federation's annual Symposium and Exposition begins a four-day run on April 20.

Rounding out the trio of European shows is the International Exhibition of Printing & Allied Trades, better known as The Graphic Arts Show, which will be held in Paris, April 29-May 8.

Interpack's exhibit-space bookings are reportedly running 65% ahead of 1958. The show is held jointly with the International Confectionery Machinery Exhibition. ●

## Paper-sleeve shipper

[Continued from page 173]

V-belt conveyor for the next step.

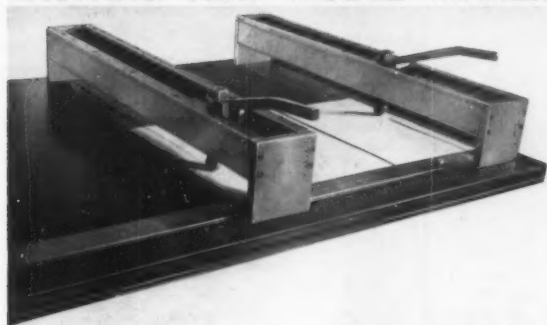
A cold resin adhesive is applied in stripes to inner and outer sides of both bottom end flaps by six tube applicators, activated by electrical switches, and the flaps are closed by stationary plows. A compression section, consisting of spring-mounted, power-driven side belts and a roller on which the "case" slides, holds pressure on the end flaps for about 30 sec. until the adhesive has set.

Development of an automatic magazine feed for the pre-formed sleeves promises to enhance the value of the machine, since it will virtually eliminate labor. Employing this completely automatic unit, a major packager of cocoa in rectangular fibre cans is now test shipping in a standard, untreated kraft paper sleeve. Tests are also under way with heavier metal cans of beer, both loose and in multipacks, and with frozen citrus concentrates. For products subject to refrigeration, including the Ballard biscuits, wet-strength paper is considered advisable. ●

**CORRECTION:** Due to some confusion in names and terminology, readers may have received the wrong impression of the Reynolds Metals Co. carded package for a soldering kit, as illustrated in Item 1 of *Packaging Pageant*, p. 106, February. This is a skin package—one of the largest produced—using 3-mil flexible, clear vinyl film produced by Flex-O-Glass, Inc., Chicago, their formula number V12. ●



## Build Better Boxes . . . WITH THIS EXCITING NEW MODEL MAKER



Designers, manufacturers and users of paperboard and plastic boxes—here is the "Trav C&C", the ultimate in model making equipment.

- so accurate, you'll turn out perfectly true boxes time after time
- so versatile, it permits diagonal, curved or spot scoring and cutting . . . makes intricately shaped boxes easy to develop
- so sensibly designed and engineered it can save up to 50% of model making time.

Both the cutting and scoring units operate on a traverse principle to provide top performance in handling, accuracy and flexibility.

The "TRAV C&C" is available as a complete unit including creaser, cutter and table—or as individual components. Write today for prices, illustrated brochure and instructions for use.

**ORIE STONE ASSOCIATES** Carlann Lane  
Valley Cottage, New York

## HAMMER BRAND



SPECIALLY WAXED SINGLE PLY  
and LAMINATED GLASSINE for  
HEAT SEALING UNIT PAKS

## GLASSINE & GREASEPROOF for CONVERTERS

GLASSINE and GREASEPROOF for BOARD LINING  
Protects AROMA • FLAVOR • FRESHNESS

TRANSPARENT  
OPAQUE

for—  
Bags  
Boxes  
Cups  
Corrugated  
Envelopes  
Liners  
Trays  
Tubes  
Unit Paks  
Wraps

COLORS

WHITE

PLAIN

WAXED

SLIP-EASY

QUILON

PLASTIC

TREATED

LAMINATED

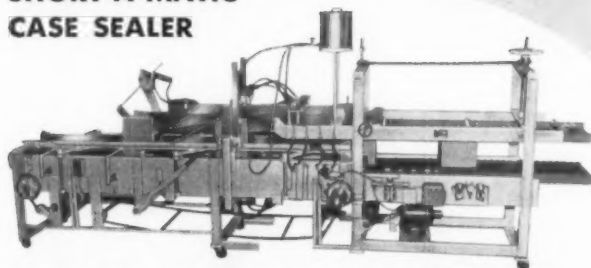
for—  
Crackers  
Cookies  
Doughnuts  
Candies  
Chips  
Food Mixes  
Powders  
Nuts  
Snacks  
Coffee  
Tea

83 Years of Quality and Service

**THE HAMERSLEY MFG. CO.**  
PAPERMAKERS  
GARFIELD, NEW JERSEY

## national short case sealers mean customer satisfaction

### SHORT-A-MATIC CASE SEALER



No matter what your case sealing problem, the National Case Sealer can be suited to meet your every requirement . . . with a versatile, easily adjustable size range.

**TELL US YOUR CASE SEALING REQUIREMENTS**  
*Prompt Deliveries*

Visit Our Booth No. 163  
**NATIONAL PACKAGING  
EXPOSITION**

April 4th-7th  
Convention Hall  
Atlantic City, N. J.

**NATIONAL  
EQUIPMENT CORPORATION**  
Packaging Division

153-157 Crosby Street  
New York 12, New York  
CAnal 6-5333-4-5-6

167 North May Street  
Chicago, Illinois  
SEely 3-7845



The new  
National Equipment Short  
Case Sealers are so radically superior  
to other case sealing machines on the  
market today, no manufacturer can afford to  
overlook their economy and efficiency.

**SHORTEST:** Strip glue application accelerates drying  
time, making the National Case Sealer the shortest and  
most compact.

**MOST ECONOMICAL:** Strip glue application saves up  
to 75% in actual glue consumption. Practically no maintenance required.

**EASE OF ADJUSTMENT:** Easy and rapid adjustment to widest  
range of case sizes. One lever motion adjusts for the width,  
and a handwheel adjustment is made for the height.



## Exhibitors' list—AMA Packaging Show

(Continued from page 171)

and strapping accessories featured; wire-stitching accessories; wire-stitching machines for box and bag closure; Model F1 strapping machine; Model F4 strapping machine; AIM Brand Slotted Angle as used in building containers and bracing costly and delicate instruments, machinery and parts. *Personnel:* W. S. Huss, N. L. Anderson, J. H. Prout, J. J. Meder, W. C. Lorden. *Hotel:* Ritz-Carlton.

**ALGENE MARKING EQUIPMENT CO.** *Booth 126.* Exhibit of flat box printer which accommodates carton sizes up to 50 by 60 in. in the flat, printing at speeds up to 3,500 boxes per hour, with all four sides automatically printed in one pass of the machine. *Personnel:* M. Mann, M. Amin.

**ALLIED CHEMICAL CORP.** *Booths 1345, 1347, 1349, 1353.* General Chemical Div. featuring Genetron aerosol propellants; Plastic & Coal Chemicals Div. displaying plastic closures, rigid urethane package liners and nylon film; Semet Solvay Div. showing coated cartons for overwraps for foods, as well as polyethylene film; National Aniline Div. featuring dyes for colored food-wrap papers and transparent polyethylene wrappers.

**ALUMINUM CO. OF AMERICA.** *Booth 425.* Exhibit of foil products, closures and rigid containers. *Personnel:* H. J. Endean, C. Sands, J. S. Hamilton, R. R. Hill, W. Turbeville, J. E. Hileman, H. W. Fritts.

**ALUMINUM FOILS, INC.** *Booth 617.* Photos of company facilities featured; also samples of wrought aluminum products and super-purity aluminum; 15-min. film on "New Horizons." *Personnel:* W. J. Baenziger, L. G. Habegger, T. W. Allison. *Hotel:* Claridge.

**AMERICAN EXCELSIOR CORP.** *Booth 205.* Exhibit of molded urethane cushioning in flexible and rigid types; also a variety of applications of Protex pads and blankets. *Personnel:* J. G. Birle, J. L. Ware, R. G. Kramer, J. W. Davidson. *Hotel:* Dennis.

**AMERICAN LATEX FIBRE SALES CORP.** *Booth 1228.* Rubr-Hair rubberized curled hair and Crintex rubberized curled fibre in sheets, packs and die-cut shapes on display. *Personnel:* D. P. DiMaggio, P. Mosher, J. Robinson, H. A. Nahigian.

**AMERICAN VISCOSE CORP.** *Film Div. Booths 420, 426.* Display of six new packaging concepts using cellophane: bundling, multipacks, portion packs, fractional packs, show-case packaging and variety packs; also examples of new film combinations and laminations using cellophane as a base; samples of fine printing on cellophane. *Personnel:* J. D. Conti, T. H. Derby, A. J. Horgan, G. W. Kindt, P. E. Lawrence, H. J. Michel, B. F. Millican, J. G. Mohlman,

M. G. O'Connor, R. E. Reynolds, J. G. Wells, T. O. Williams, V. N. Winkler, F. W. Spannagel. *Hotel:* Shelburne.

**ANACONDA ALUMINUM CO.** *Booths 922, 924.* Display of products and services available to users of flexible and rigid aluminum packaging from the foil, laminating and container divisions of the company. *Personnel:* C. W. Huflage, J. E. Bouhl, W. R. Cory, A. W. Mengel, J. Krause. *Hotel:* Claridge.

**ANDREWS, MARK, CO., INC.** *Booth 630.* Exhibit of standard line of 1960-model flexographic pressure-sensitive tape and label printing equipment; new rotary flexographic job press to print two colors on both sides of stock and deliver dry finished sheets in one trip through machine; also new Label-Ette press, small offset machine for producing point-of-requirement shipping and product-identification labels. *Personnel:* M. B. Andrews, R. Kuntz, L. Markovich, D. S. Lehmann, J. R. Garber.

**APEX MACHINE CO.** *Booth 119.* Display of Model M automatic rotary printing unit used on wrapping and bundling machines for printing all six sides of a package before wrapping, for use in printing many lines of small type on fine, smooth materials or for large trademarks or other information on wallboard and similar materials; also cylindrical and flat marking machines. *Personnel:* O. Bodor, B. Bodor, A. R. Coningsby, Jr., K. Kuett. *Hotel:* Colony Resort Motel.

**ARABOL MFG. CO.** *Booth 263.* Exhibit of specification adhesives for minimum cost and maximum efficiency to meet today's demands of production and quality. *Personnel:* W. A. Weaver, E. E. Diedrichs, W. Godfrey, H. E. Weingartner, C. R. Erikson, L. Eickstedt, J. Gerhart, W. Thompson. *Hotel:* Claridge.

**ATLAS VAC-MACHINE CORP.** *Booth 1326.* Exhibit of complete blister-forming and packaging equipment. *Personnel:* D. R. Zelnick, A. Savino.

**AVERY LABEL CO.** *Booths 153, 155.* Exhibit of pressure-sensitive labels, including new FABric labels and labeling equipment; labeler which automatically dispenses and applies pressure-sensitive labels directly to products or packages at production-line speeds; new Etiprint Super label imprinter; also several electric semi-automatic label dispensers. *Personnel:* R. W. Morris, M. A. Contreras, R. Harvey, J. Dyer, W. Webster. *Hotel:* Shelburne.

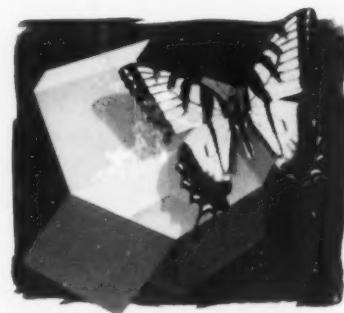
**AVISUN CORP.** *Booths 1101, 1102.* Description of characteristics and applications of Olefane polypropylene featured; molded products produced from polypropylene resins. *Personnel:* E. T. Severs, J. Adrian, R. Winters, C. Setterstrom, R. Ridgway, J. Thompson, W.

in packaging

# Weyerhaeuser (Ware'-hous-er)

is pronounced

# Ingenuity (In-je-nu'-i-ti)



If there were a popular demand for butterfly wings, Weyerhaeuser Ingenuity would package them to give you a selling advantage

Weyerhaeuser knows packaging from the ground up—from the tender shoots of tiny saplings to the whims that ring cash registers. Weyerhaeuser boxboard plants supply quality materials with which specialists work in creating sales-building inducements to influence shoppers.

At Weyerhaeuser, knowing *what* folding carton to make is just as important as knowing how best to make it for user convenience... product protection... distributor and dealer approval... visual appeal. Working as a team, the Weyerhaeuser group welcomes packaging problems. For advanced thinking in your folding cartons... write Weyerhaeuser.

### REQUEST NEW "INGENUITY" BOOKLET

This booklet can give you a new concept in packaging. See why working-with-Weyerhaeuser is the answer to folding cartons.

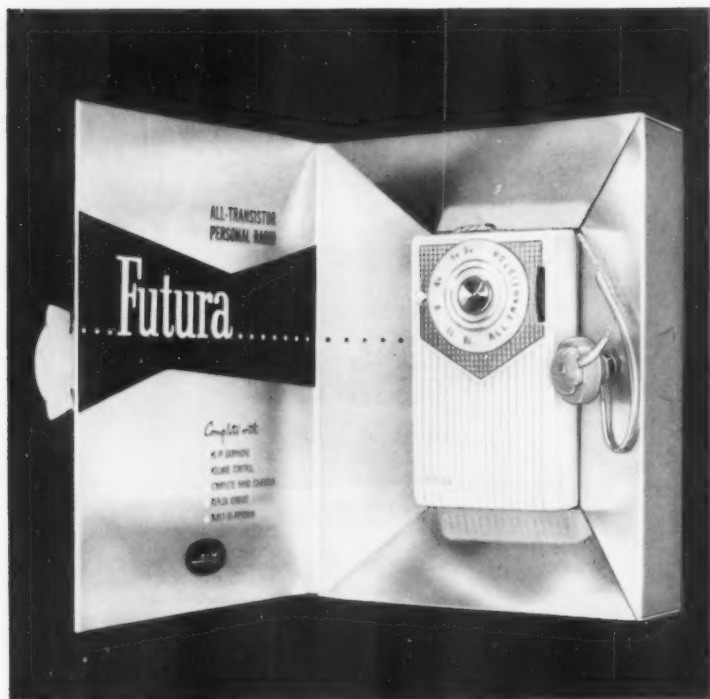


## Weyerhaeuser Company

Boxboard and Folding Carton Div.  
Headquarters  
919 N. Michigan Ave., Chicago 11, Ill.



## Weyerhaeuser Packaging Ingenuity at work for Bell Products



## Self-Display! Impact! Economy!

*Bell Products got them all in this novel*

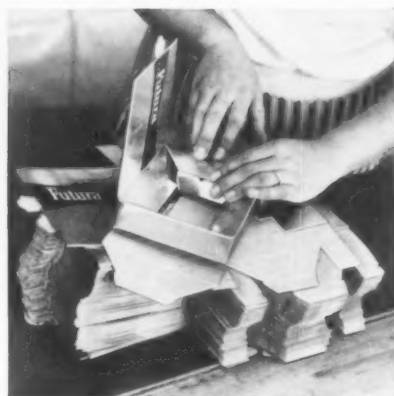
## Carton by Weyerhaeuser

**THE PROBLEM.** A carton to "merchandise" miniature radios—with sufficient bulk for easy handling . . . stability at top, bottom, corners, for product protection and sustained shelf-beauty . . . striking design that invites inspection, enhances product appearance . . . economy for volume-priced sales.

**THE ANSWER.** This unusual book-type package by Weyerhaeuser that displays the radio in a gold "picture frame" setting. Inside of cover carries same selling copy as outside to attract attention whether open or closed. Easy to fold and fill, it's another reason why Bell Products Co. of St. Louis says, "25% of our sales result from Weyerhaeuser know-how in merchandising."



Cartons are single die-cut sheets of boxboard, gold-coated on one side and so folded that the inside of the double-thick cover extends to form one side of the "picture frame." Tab for locked closure "floats" between the cover sheets.



Inner edges of the side "picture frame" members are glued to the bottom section so that folding the carton automatically forms the frame bevels, and assembly is locked by folding over the two end cutouts. Instruction sheet is slipped under the "picture frame," the earphone goes into a receptacle at one side, and the radio fits snugly within the gold display case, yet may be removed for ready inspection.



Write today for this interesting folder. It tells the whole Bell Products packaging story.




**Weyerhaeuser Company**

Boxboard and Folding Carton Division

Headquarters, 919 N. Michigan Avenue • Chicago 11, Illinois

PLANTS AND SALES OFFICES COAST-TO-COAST • A NATIONWIDE STAFF OF PACKAGING SPECIALISTS





**PRODUCTION QUALITY!**

Color uniformity from run to run — correct inking to prevent mottling, offset or picking — accurate die-cutting of labels — finest quality printing plates (safely stored when not in use)

See our new "No. 900" Imprinter-Rewinder — (high speed Roll-label imprinting and rewinding)

**OLIVER**

Roll-Type, Heat Seal labels are colorful, attention-getting labels that stand out on the product and stand up under use. They are used in continuous roll form and are applied by mechanical heat-sealing methods. Easy to store — economical to use. Applied by automatic labelers, they are cleaner — no wet adhesives.

Let Oliver create and produce labels for you in one to four colors that are attractive and durable and command attention at point-of-purchase. May we serve you?

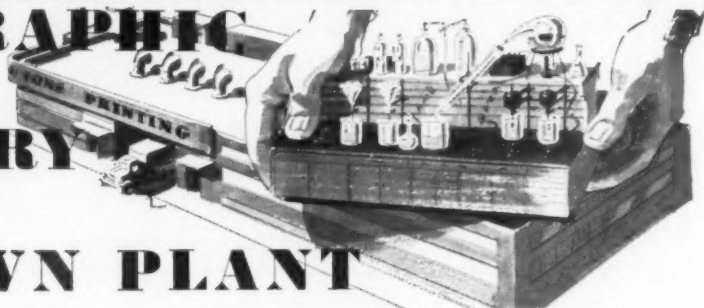
See Us at  
Booth No. 637  
at 29th A.M.A.  
Packaging  
Exposition  
April 4-7, 1960  
Atlantic City

**OLIVER**  
MACHINERY COMPANY

**LABEL DIVISION**

445 6th, N.W., Grand Rapids 4, Michigan

## A FLEXOGRAPHIC LABORATORY in YOUR OWN PLANT



● Wilsolite's Technical Service Department is prepared today, tomorrow, or at your convenience, to help you solve any problems you may have in printing with flexible materials.

Wilsolite-trained field technicians help you work out the answers by working right in your own plant . . . so that when they find solutions to your particular problems, you know the solution will work.

Write to Wilsolite for help in your technical problems. Rely on judgment which is based on experience in every phase of flexography.

**GOODYEAR** Buna N, Engraving Rubbers; Grey and Black; thicknesses 3/32" to 1/2", hardness range 20 to 80 durometer, including special inserts for register control. Also unvulcanized rubber in Red, Grey and Black *plus* Stickyback for plate mounting and Goodyear Related Products.

**"WILSOLITE"** Sheet matrix materials; Red or Black fill-in powders, embossing sheets, resin impregnated papers and cloth for shrink control; and perforated metal. Large stocks always on hand. Ask for prices and samples.

# WILSOLITE

**C O R P O R A T I O N**  
1927 Niagara Street, Buffalo 7, New York

OFFICES: Hackensack, N. J. • Atlanta, Ga.  
Pensacola, Fla. • Port Erie, Ont.

WAREHOUSES COAST TO COAST AND CANADA



McNulty, P. Moeller, E. Irish, J. Warren, N. Hansen, R. Adams. *Hotels: Shelburne, Empress.*

**BARTELT ENGINEERING CO.** *Booths 1142, 1148.* Exhibit of flexible-packaging equipment; also cartoning and filling equipment. *Personnel:* H. L. Bartelt, W. T. Boston, R. D. Lamb, C. S. Worthington, J. L. Tobin. *Hotel: Claridge.*

**BELL-MARK CORP.** *Booth 1003.* Exhibit of Model 1240 printing attachment for packaging and other production machinery for imprinting product descriptions, price information, etc., with 12-in. printing circumference, available in widths up to 15 in., either friction driven or through parent machine; other printing and coding attachments, including mechanical and electrically operated miniature printers and two-roller units; also type faces and specialized printing inks. *Personnel:* J. Mastracchio, A. J. Alessi, R. Clark, R. Heller, W. Schram, E. O'Brien, T. Casey.

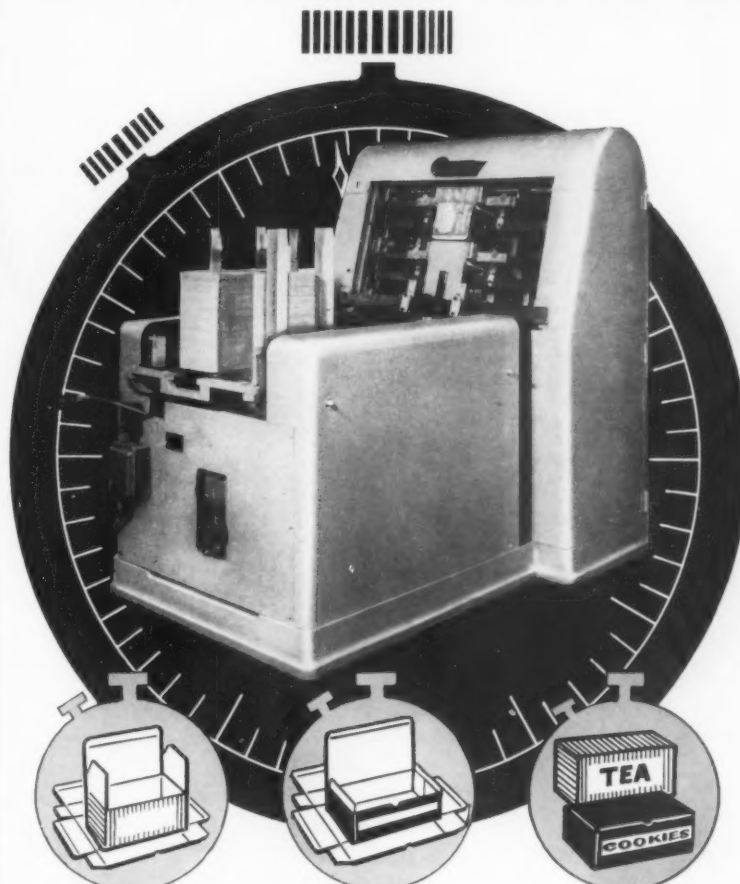
**BEMIS BRO. BAC CO.** *Booths 404, 406.* Theme of display: "where flexible packaging ideas are born," featuring latest in paper, textile, plastic and waterproofing packages, including automatic weighing, closing and handling machinery; also most recent high-speed, shelf-package, Deltaseal closing machine, fully automatic unit for 1- to 3-lb. paper packages featuring Deltaseal flat top seal. *Personnel:* D. O. Maylath, R. W. Michalowski, A. F. Keating, C. G. Musche, W. D. Stohlman, W. D. Conway, R. J. McDonald, M. C. Barnes. *Hotel: Ambassador.*

**BENSING BROS. & DEENEY,** Div. of Sun Chemical Corp. *Booths 542, 546.* Flexographic inks for the latest paper, film and foil packaging designs; details on developments in inks for flexography. *Personnel:* M. B. Lousin, A. Bouffard, L. J. Gaspari, E. Craig, T. Morris, M. Gross, S. Shapiro, J. Romaska, D. Beaverson, F. Schafer, R. Bensing, J. Plunkett. *Hotel: Shelburne.*

**BETTER PACKAGES, INC.** *Booth 130.* Display of manual and electric machines for gummed and pressure-sensitive tapes; new Better Pack 555 and CodeTaper 555 touch-button electric, automatic tape dispensers to code or mark cartons or packages as they are sealed; several new, fully automatic variations of general shipping-room key-feed electric dispensers for sealing typical production runs. *Personnel:* T. H. Krueger, M. W. Waggoner, L. James, O. K. Hill, A. D. Smith, N. Campanaro, R. Chilton, Jr., E. F. Deline, T. E. Delius, R. L. Drysdale, Sr., K. G. Ellison, L. R. Laughner, G. F. Leberz, G. McClure, J. Murphy, H. L. Putnam, D. A. Smith, F. C. Smith, H. B. Smith, B. Stallings, P. T. Toyofuku, W. N. Turner, J. C. Valestin, D. Wilson, C. L. Wishner.

**BINER-ELLISON MACHINERY CO.** *Booth 211.* Filabelmatic, Labelmatic [Continued on page 326]

## 180 Perfect Cartons or Trays EVERY MINUTE!



economical glued cartons and trays from low-cost uncoated blanks . . .

. . . or heat-sealed cartons and trays that are grease- and moisture-resistant from poly-coated blanks . . .

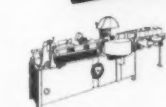
. . . for packaging all kinds of products

**High speed . . . automatic . . . and perfectly-shaped trays and hinged, top-opening cartons!** For packaging all types of bakery products . . . tomatoes and fruits . . . confections . . . cigarettes . . . drugs . . . and hardware specialties. Operates at *variable* speeds. Can be adjusted to produce a wide range of carton and tray sizes. **Peters Model SG** glues low cost uncoated blanks. **Model SG-P** heat-seals poly-coated blanks. Remember *glued* or *heat-sealed* cartons cost less for material, shipping and storage . . . and eliminate costly set-up labor.



Ask for a demonstration or write for descriptive folder

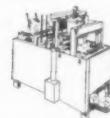
**MACHINERY COMPANY**  
4700 Ravenswood Ave., Chicago 40, Ill.



carton folding and closing machines



carton forming and lining machines

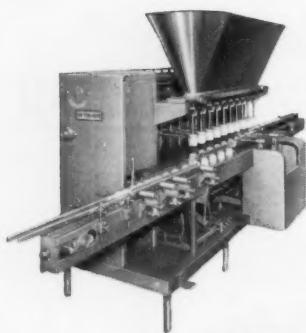


moderate-speed carton and tray forming machines



cellophane sheeting and stacking machines



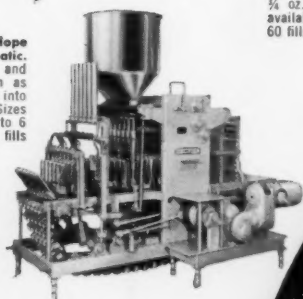


**No. 19A Colton-Hope High-Speed Automatic.** Fills liquids, creams, pastes into bottles, jars, cans.  $\frac{1}{4}$  oz. to 32 oz. per nozzle; 4 to 14 nozzles. Up to 250 fills per min. Many accessories available.

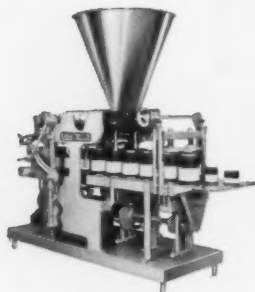
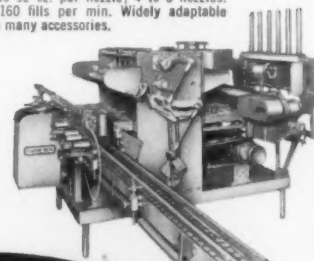


**No. 19 Colton-Hope High-Speed Automatic.** Fills liquids, creams, pastes into bottles, cans, jars. Excellent for filling, top-finishing, disc-placing in cosmetic cream work.  $\frac{1}{4}$  oz. to 32 oz. per nozzle; 4 to 8 nozzles. Up to 160 fills per min. Widely adaptable through many accessories.

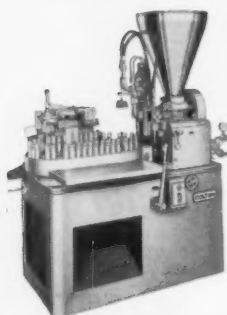
**No. 27 Colton-Hope Heavy-Duty Automatic.** Fills high viscosity and ropy materials such as caulking and greases into tubes or cartridges. Sizes up to 2" x 10"; 2 to 6 nozzles. Up to 90 fills per min.



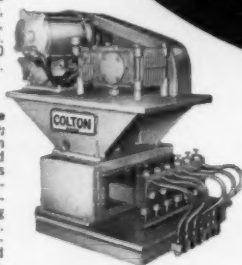
**No. 15RF2 Colton-Hope Two-Line High-Speed Automatic.** Fills liquids, creams, pastes into glass, plastic, tin, paper containers.  $\frac{1}{4}$  oz. to 32 oz. per nozzle; 1 or 2 nozzles available. Many outstanding features. Up to 60 fills per min. Many accessories available.



**No. 21 Colton-Hope Single and Twin Automatic Conveyorized Heavy-Duty Filling Machine.** For filling liquids, creams, light and heavy pastes such as paints and similar products into jars and cans. Production up to 10 cycles per minute per nozzle. Fills up to 1 gallon per nozzle. 1 and 2 nozzles available. Paint can lid dropping and pressing features available.



**No. 175 Colton Automatic Tube Filler, Closer and Crimper with Ejector.\*** Fills liquids, creams, pastes into tubes, small bottles, jars, cans. Cleans, fills, folds, crimps, ejects. Various fillers offer 30 to 300 tubes per min. per machine.



**\*No. 176 Plastic Tube Sealing Attachment;** low cost conversion unit to replace standard folding heads on Models 17TF and 175TF machines. Gives dual-purpose machine handling metal or plastic tubes. Model 172 Colton exclusively for high speed sealing of plastic tubes.

**Series 100 Colton High-Speed Multiple Liquid Fillers,** (for bench or conveyor belt use). Fills liquids into jars, bottles, cans. Up to 4 fl. oz. per nozzle; 4 to 12 nozzles. Up to 480 fills per min. Can be manifolded for larger fills. Extreme accuracy, high production in a low-cost machine.



**Call Colton**  
FOR EVERY FILLING NEED

The money-saving  
precision of **COLTON**  
exacto-metric filling  
plus **high operating speed**  
make basic Colton fillers the big buy

These basic fillers typify the wide range of filling covered by the Colton line—most complete and versatile in the world. Such basic machines, readily adaptable to individual application by means of accessories engineered to the machine, give, in effect, a custom-engineered machine at standard machine price. It is this adaptability that enables us to say "Colton fills practically ANYTHING into ANYTHING."

Many other Colton fillers available. Write for Filling Machine Application Data Sheet. Detailed specification sheets available.

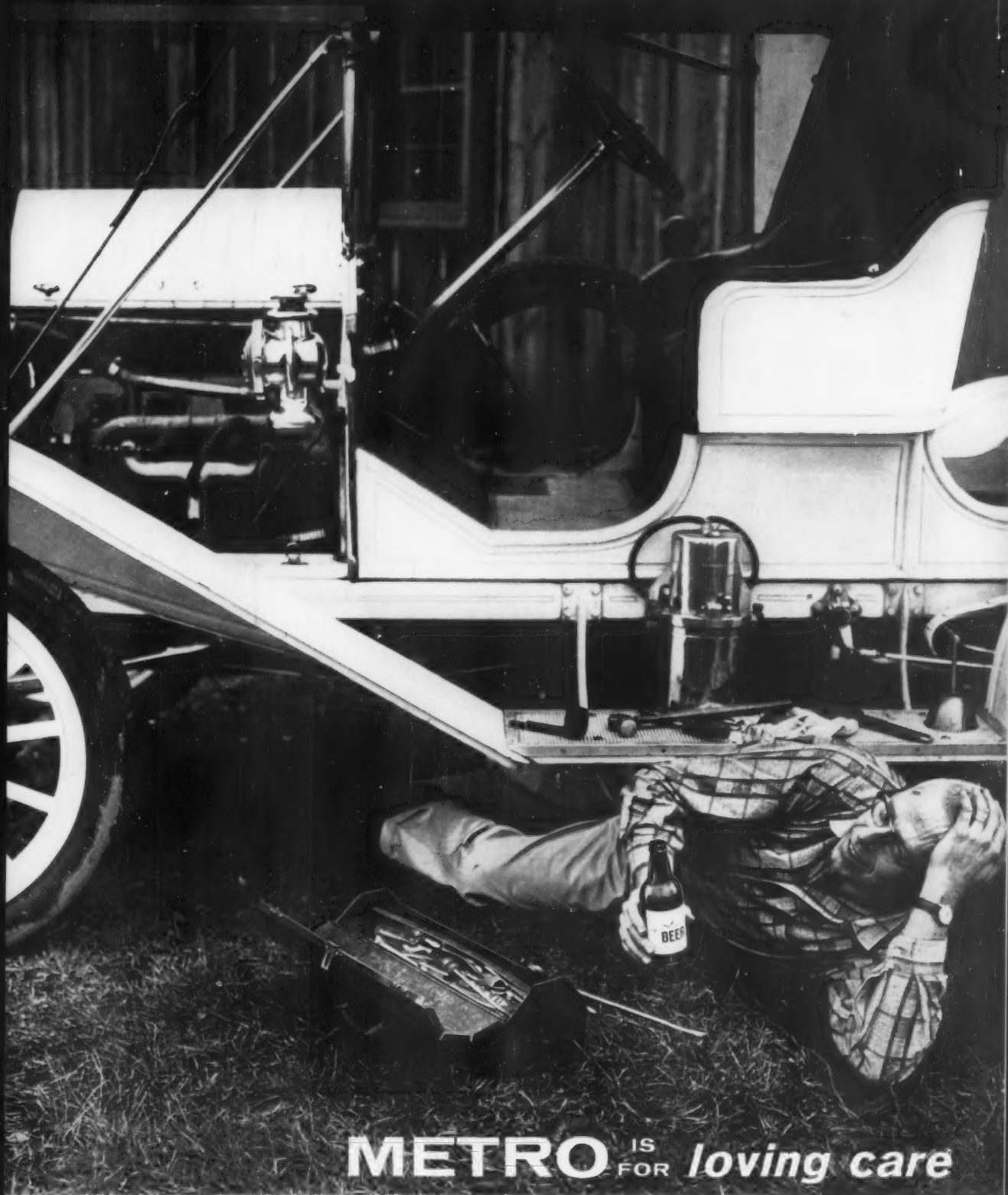
Arthur Colton Company, 3400 E. Lafayette Ave., Detroit 7, Michigan. Sales and Service offices throughout the country.

Plants: Detroit, Marcelona, Elk Rapids, Michigan.

**COLTON fills practically ANYTHING into ANYTHING**







## METRO <sup>IS</sup> FOR *loving care*

Our hobby is the tender care and feeding of service pipe lines—from us to you. Whether your product is brewed or brandied, pickled or preserved, Metro has *the* right glass container—complete with classy chassis—that will provide the perfect frame—the all-important plus for your product. For a service that hits on all cylinders—for a service that gets you where you want to go—ask for *Metromatic!*



MANUFACTURERS OF QUALITY GLASS CONTAINERS

**METRO GLASS**

DIVISION NATIONAL DAIRY PRODUCTS CORPORATION

GENERAL OFFICES: JERSEY CITY 3, NEW JERSEY



# The NEW way of slitting PLASTICS and PRESSURE SENSITIVE TAPES!\*



**LEV-AIR-MATIC  
500**

\* In addition to plastics and pressure sensitive tapes, the sensational LEV-AIR-MATIC 500 will accurately slit all types of gasket material, cured and uncured rubber, teflon, paper, insulating materials and woven fabrics.

See this amazing machine in operation at our Booth, #1044, National Packaging Exposition, Atlantic City, April 4-7.

## **LEVER** MANUFACTURING CO., INC.

120 West 31st Street, New York 1, N.Y. CHickering 4-0140

**VALUABLE INFORMATION:** If you do not plan to attend the Packaging Show, use the coupon below to get complete facts.

LEVER MANUFACTURING CO., INC., 120 West 31st Street, New York 1, N.Y.

NAME.....TITLE.....

FIRM.....

STREET.....

CITY.....STATE.....

[Continued from page 323]

and Feedomatic unsrambler on display. Personnel: T. E. Ellison.

BOSTITCH, INC. Booths 221, 225. Display of wide crown staplers and wire stitchers for bottoming corrugated shipping containers, including belt-fed Model FC95; conveyor-mounted wide crown stapler heads; various hand tools for packing and shipping; also Stencil-Matic stenciling equipment. Personnel: E. G. Gardner, J. M. Nestor, M. C. Schuler, L. K. Grimes, G. G. Slade, S. L. Smith. Hotel: Haddon Hall.

BRADY, W. H., CO. Booth 1304. Demonstration of new automatic marking machine for identifying cylindrical surfaces with printed, self-adhering label; Printmatic automatic label printer and die cutter; self-bonding nameplates; signs, markers and labels. Personnel: W. S. Aldrich, F. C. Kluhsman, W. J. Tuite, E. S. Jenkins.

BRAUN, W., CO. Booth 527. Exhibit of extensive line of unusual stock and private-mold containers; plastic bottles; new Trend design container line; Trend design closures; Squeeze-N-Turn safety cap; colored glass; new ideas from Glass Crafters on ceramic decorating. Personnel: J. Braun, M. Braun, S. Wohl, Z. Braun, H. Jacobson, M. Fript, A. A. Friedberg, M. J. Tauger, R. M. Cohen, H. P. Siegel, A. D. Sternberg. Hotel: Ritz Carlton.

BROWN-BRIDGE MILLS, INC. Booths 121, 123. Exhibit of flat-as-a-pancake gummed label paper; heat-seal papers; also Red Streak gummed tapes. Personnel: H. E. Murgatroyd, F. Holt, E. C. Corey, R. S. Rowlett, R. J. Crane, J. P. Wilt. Hotel: Chalfonte-Haddon Hall.

BURT, F. L., CO. Booth 1316. Exhibit of Models A and B piston fillers; also Model T twin piston filler. Personnel: F. L. Burt, H. J. McMackin. Hotel: Dennis.

BURT, F. N., CO., INC. Booth 649. Multicolor lithography, process work, reproductions of folding cartons and various types of set-up boxes. Personnel: O. W. Honsberger, A. B. Buchanan, L. House, R. Weinig, J. Rau, T. Hogan, C. A. Hammond, M. Yates, A. Foster. Hotel: Marlborough-Blenheim.

CAMPCO, Div. of Chicago Molded Products Corp. Booth 1005. Exhibit of latest applications of company materials in industrial, consumer and pharmaceutical packaging; acetate, butyrate, linear polyethylene and rubber-modified styrene thermoplastic sheet and film; collection of outstanding case histories of applications in packaging field. Personnel: E. Bachner, Jr., J. Bachner, F. Adams. Hotel: Chalfonte-Haddon Hall.

CARBERT MFG. CO. Booth 1357. Display of vertical and horizontal polyethylene bag-sealing machines; pressure-sensitive label applying machine;

[Continued on page 330]

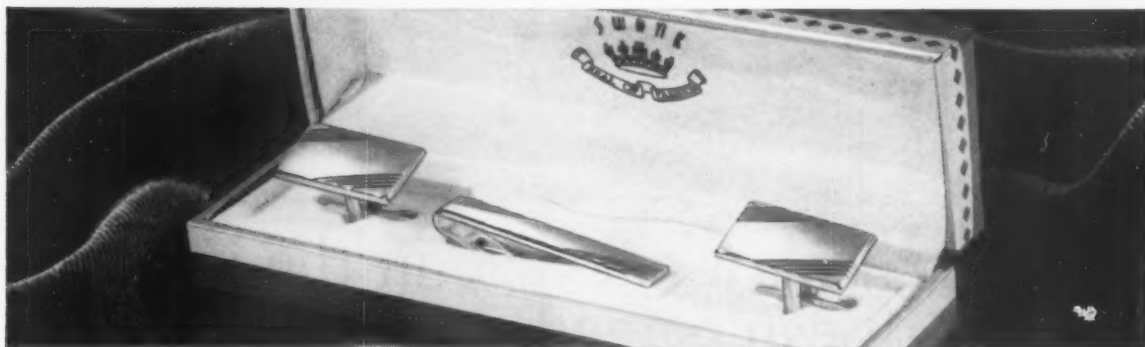


# Feel! Vinyl with a Velvet touch!

"High style for SWANK . . . with Nashua's flocked vinyl"

## ...Nashua's new Flocked Vinyl

**SWANK'S CHOICE FOR GLAMOROUS PACKAGING!**



Looks like velvet! Feels like velvet! Yet it's Nashua's new, low-cost flocked vinyl!

Nashua vinyl displays Swank products at their elegant best . . . and vacuum-formed "pockets" hold them at their ideal display angle.

You can pressure-form it . . . vacuum-form it . . . bend or die-cut it. Nashua's flocked vinyl stays beautiful.

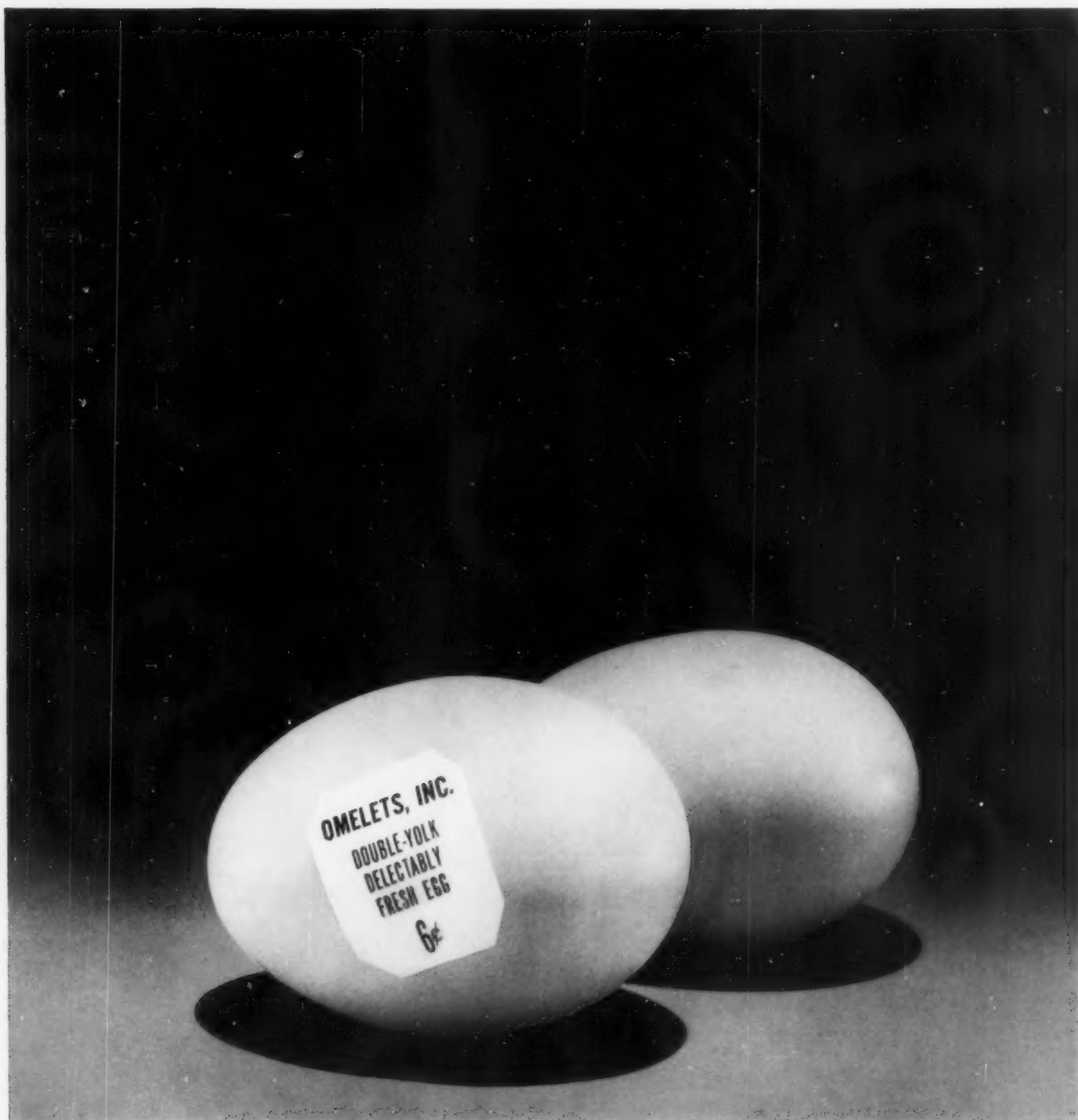
Great way to give packaging a low-cost "plush look!"

For eye-catching display . . . for product protection . . . investigate this exciting new packaging material. Available in a wide range of gauges, in rolls or sheets, with a broad selection of colors in cotton and rayon flock. Write for samples and full information to Nashua Corporation, Dept. MP-30, 44 Franklin St., Nashua, N. H.

Nashua's flocked vinyl is backed by 30 years experience with flocking and flock adhesives. Nashua also manufactures Stylour® flocked Styrene.

**NASHUA** Corporation 





## There isn't a package in the world that doesn't need a selling label

Two potential omelets—each in the most perfect package ever designed—yet which will sell first? The egg of unknown age, price and content or the one the consumer *knows* holds twice the goodness, fresh from the henery, for only 6¢? Soabar adds “selling pluses” like this to any package: with versatile marking equipment, geared to the speed of modern production and the varying require-

ments of today's diversification, with *flexible marking methods* that permit *split-second* imprint changes of your different information, with Soabar roll tickets and labels tailored to meet your individual needs for Identification, Content, Pricing, Shipping and Stock Control. Now, in your own plant, you can imprint selling labels to suit your packaging rapidly, efficiently, economically, with-

out skilled operators or costly inventories of pre-printed labels.

Visit Soabar at Booth No. 1204 at the National Packaging Exposition



**Soabar**  
company

Specialists in Marking Equipment and Roll Tickets and Labels Since 1912

Soabar, 4221 Van Kirk Street • Philadelphia 24, Pa.—In Canada distributed by The Jonergin Co., Inc. and W. J. Westaway Company, Limited.



# IMPORTANT

*new developments in  
packaging that may  
dramatically affect your future*

Tronomatic, a leader in the development of advanced-designed machinery, is introducing several new machines. These new machines will be on display and in operation at the AMA Packaging Show, Atlantic City, April 4th to 7th. Included will be \*Automatic thermo-plastic-sheet pressure-forming equipment \*Automatic high-speed conveyor blister sealer and \*Automatic equipment for molding expandable polystyrene.

Also on display will be Tronomatic's precision-built, production-tested Automatic Slide Package Former.

If there is even a slight possibility of using any of this equipment in your operation, it will pay you to visit Booth 1438 at the Packaging Show. You will be given a demonstration plus complete facts on this packaging machinery.

If for any reason, you cannot attend the show, phone or write us for the facts on this new machinery. We don't want you to miss it:

## **Tronomatic Machine Manufacturing Corp.**

1881 Park Avenue, New York 35, New York      Sacramento 2-4611

*Manufacturers of plastic forming, molding, fabricating, sealing and cutting equipment.*



# AUTOMATIC ROTARY AMIC PRINTING UNITS

**Compact Friction or Web-Driven  
Printing Heads That Incorporate  
Into Automatic Processing or  
Packaging Equipment**

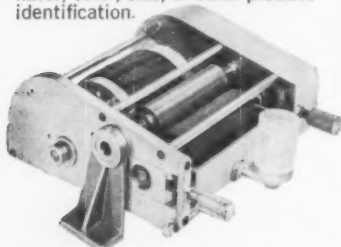
CLEAR, QUICK DRYING, PERMANENT IMPRESSIONS



**model a**

**FOR CONFINED AREAS  
WITH QUICK TYPE CHANGES**

This unit features a readily removable type cylinder. For adding supplemental information such as flavor, color, size, or other product identification.



**model m PRINTS LARGE AREAS  
OR MANY TYPE LINES**

Adapts to roll, sheet or strip processing. In narrow or wide widths, on smooth or rough materials such as film, paper, wallboard, etc. Used often on wrapping or bundling machines to print all 6 sides of a package before wrapping.



**model c**

**AUTOMATICALLY REGISTERS  
INDIVIDUAL PACKAGE MARKING**

Marks packages in the same spot by automatically resetting the printing wheel after each package has passed. Can be mounted for top, bottom or side marking.

A SIZE AVAILABLE FOR EVERY REQUIREMENT



Manufactured By  
**MACHINE CO., N.Y.C.**  
14-13 118th St.  
College Point 56, N.Y.

See us at Booth 119

[Continued from page 326]

also heat-sensitive label applying machine. *Personnel:* R. W. Saumsiegle, R. L. Hewson. *Hotel:* Traymore.

**CELANESE PLASTICS CO.**, Div. of Celanese Corp. of America. *Booth 342.* Technical service available to users of company plastics; new packages on display; also packages employing FDA-approved acetate films. *Hotel:* Shelburne.

**CEL-FIBE DIV.**, Personal Products Corp. *Booth 1453.* Exhibit of new flame-retardant forms of bleached, moisture-absorbent cellulose wadding; C-B laminate and other recently developed or improved items in wadding line; demonstration of compressometer measuring "continuing bulk" of cushioning material; new "convenience pre-packaging" of stock Cel-Fibe sample rolls. *Personnel:* R. D. Glidden, C. E. Sanquist, J. Egan, N. G. McLean, E. O'Mara, C. Sass, L. Levine, K. C. Kerrihard, J. R. Odell. *Hotel:* Claridge.

**CELLUPLASTIC CORP.** *Booth 1217.* Complete line of plastic vials and jars, as well as new line of large-diameter semi-rigid plastic containers featured. *Personnel:* J. L. McKenna, G. E. Johnson, J. D. Proctor, R. A. Kennedy. *Hotel:* Dennis.

**CELOTEX CORP.** *Booth 1153.* New high-resilient, highly flexible industrial fibreboard for special cushioning and packaging applications available in thicknesses of  $\frac{3}{8}$ ,  $\frac{1}{2}$ , 1, 2, 3 and 4 in. for applications requiring greater resiliency than neutral pH industrial packaging board; also inner-pack and cushioning applications of regular and neutral pH industrial board including equipment and components ready for shipment. *Personnel:* B. A. Savage.

**CHAFFEE, RALPH, & CO.** *Booth 268.* Exhibit of Rotor-Sealers sealing all popular plastic films; automatic infeed, coder dater and automatic hole-punching device; special sealing machine with heat, pressure and dwell time indicated by dials, sealing metal foil and Government-specified materials; also showing of 16-mm. movie on various installations in food and merchandise packaging. *Personnel:* R. W. Chaffee, C. C. Reynolds, L. A. K. Snyder. *Hotel:* Eastbourne.

**CHAMPION PAPER & FIBRE CO.** *Booths 1123, 1127, 1129.* Miscellaneous packages and containers using company papers will be displayed under  $\frac{3}{4}$ -in. plate glass which makes up platform floor area of exhibit; also series of four large backlit trademarks screened on translucent white plastic. *Personnel:* C. Craig, B. Ziegler, B. Ervin, J. Parker, B. Dohrmann, J. Wright, H. Baldwin, E. Mendels. *Hotel:* Sheraton Ritz Carlton.

**CHANAL PLASTICS CORP.** *Booth 1532.* Exhibit of vacuum-formed and pressure-formed displays, packages and utility items; also blow-molded bottles,

toys and industrial parts. *Personnel:* A. Karp, D. Freeman, R. Morse, F. Seborowsky, T. Krame. *Hotel:* Traymore.

**CHASE BAG CO.** *Booths 1131, 1135.* New heavy-duty plastic shipping sack featured; also stretchable paper bags and waterproof laminated textile bags. *Personnel:* E. M. Woodrich, R. L. Lake, G. P. McGovern, E. F. O'Callaghan, G. J. Riley, A. W. Clark.

**CHASE EQUIPMENT CORP.** *Booth 662.* Exhibit of automatic aseptic filling and stoppering machine for lyophilization technique; new design ampoule filling and sealing machine; precision powder-filling machine; sterile bottle sorter; also sterile polyethylene stoppering machine. *Personnel:* J. Henderson, W. Munzer, C. Owens, G. Parodi. *Hotel:* Dennis.

**CINCINNATI BOX & PARTITION CO.** *Booth 1538.* Exhibit of new metal corner-stay machine; metal corner stay, boxes and partitions; stock boxes; material handling for new distribution program. *Personnel:* C. J. Brandt, R. Maeser, O. Morrison, J. Flake, P. Smith, M. Woodrum. *Hotel:* Claridge.

**CLAREMONT PIGMENT DISPERSION CORP.** *Booths 923, 925.* Displays of various products printed by customers using variety of flexographic inks; new "Poly-Alcol" alcohol-reducible polyamide ink featured. *Personnel:* M. Marlowe, M. W. Neitlich, H. C. Felsher, J. Keeler, S. Alleva, S. Borgia, H. Nash, N. Tozza. *Hotel:* Chalfonte-Haddon Hall.

**CLARK, J. L., MFG. CO.** *Booths 908, 912.* Exhibit of general line of lithographed metal containers; new line of drawn aluminum cans with compounded aluminum ends; "Spring Grip" aerosol overcaps; award-winning metal lithography; selection of photographs illustrating production of metal cans from initial design through finished fabrication; also new apothecary can. *Hotel:* Chalfonte-Haddon Hall.

**CLEVELAND CONTAINER CO.** *Booth 538.* Complete line of spiral and convolute-wound fibre containers; transparent C-Thru containers with paper, plastic and metal ends; metal-end telescope and screw-cap containers; mailing tubes; paper tubes and heavy-wall cores; also packaging for Government spare-parts containers under Specification MIL-C-3955. *Personnel:* W. F. Walker, A. E. Lange, L. C. Hoaglund, A. Schoenfeld, J. Burleson, P. W. Stump, R. F. Boll. *Hotel:* Sheraton Ritz Carlton.

**CLIMAX PRODUCTS DIV.**, Lodge & Shipley Co. *Booth 1417.* Vacuum filler and unscrambling table on display. *Personnel:* R. G. Hilgeman, E. Rowe-kamp. *Hotel:* Shelburne.

**COLLAPSIBLE TUBE MFRS. COUNCIL.** *Booth 1301.* Animated, colorful display demonstrating manufacture of collapsible metal tubes showing wide



Another Outstanding  
New Product from  
*Chippewa*

for the ultimate in  
surface protection  
and  
cushioning

*Chippewa*  
BRAND NEW  
CORRUGATED  
**COTTON-PAK**

For Specific Application Meets Military Spec. MIL-P-116C

*Chippewa*  
PAPER PRODUCTS CO., INC.  
2425 S. ROCKWELL ST., CHICAGO 8  
EASTERN PLANT: 490 HUYLER ST., SOUTH HACKENBACK, N.J.



## Mix and move fluids quickly ...pump direct from drum!

**Graco Fast-Flo Pumps** reduce handling costs. They transfer measured amounts of different fluids direct from original containers. Ideal for batching, applying or mixing... fluids are transferred quickly and safely. Aids good housekeeping; eliminates contamination.

Send for more information about this amazing *Graco* Fast-Flo that's suited both for large and small operations. It handles materials as thin as alcohol, as thick as cookie frostings! Fast-Flo Pumps are also available in stainless steel. Send for free idea booklet!



**GRACO**  
ENGINEERS AND MANUFACTURERS  
**GRAY COMPANY, INC.**  
320 Graco Square  
Minneapolis 13, Minnesota

Factory Branches  
New York, N. Y.  
Philadelphia, Penna.  
Detroit, Michigan  
Atlanta, Georgia  
Chicago, Illinois  
Houston, Texas  
San Francisco, Cal.  
Sales Office  
Toronto

## SAMCO JR.

Designed  
to fill  
shorter  
runs

IDEAL FOR  
FOAMY AND  
DIFFICULT  
PRODUCTS

Uncomplicated, simple in operation and therefore efficient and trouble free. Main supply contained in overhead tanks. Flow of product feeds through stainless steel piping to a common "head." From this, flexible hoses connect to nozzle blocks.

One operator can fill foamy type products such as liquid soap and shampoos at a rate of 10 to 40 per minute, depending on size. Eight filling heads. Adjustable from 1 ounce to one gallon sizes. Write for complete information—the coupon is for your convenience.



Pneumatic Scale Corp., Ltd.  
82 Newport Avenue, Quincy 71, Mass. Branches, Chicago and New York  
Please send us complete information on Samco Jr.

NAME \_\_\_\_\_ Position \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_



# DON'T MISS ERDCO **BOOTH 1446**

## Automatic Plastic Packaging Machines for Every Need

### VACUUM & DRAPE FORMING

*Automatic Vacuum-Drape Forming-Trimming Machine* vacuum forms plastic bubbles, or drapes items of any shape or size for packaging or other uses.

### BUBBLE SEALING

*Clear-Pak Jr. (bench model) Automatic Bubble Sealing Machine* is so easy to use and costs so little that any small plant can afford one or two.

*Clear-Pak (floor model) Automatic Bubble Sealing Machine* for all types of contour sealing. Produces multiple packages. Automatic unloading.

### 6-IN-1 PACKAGING MACHINE

*Completely Automatic . . . from Film to Package.* It feeds, vacuum forms, fills, heat seals, prints and die-cuts bubble packages of any shape for high speed, mass production.

Send for Bulletins Giving Detailed Specifications and Applications

**ERDCO ENGINEERING CORP.**

Addison, Illinois

Dept. B



Manufacturers of packaging machinery and  
industrial electronic heating equipment

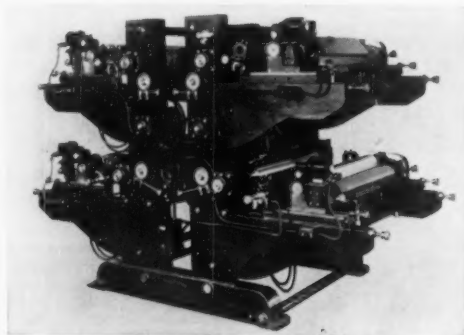
0325

### BASIC PRINTER NO. 2

# 8

## BASIC FLEXOGRAPHIC PRINTERS 184 COMBINATIONS OF EQUIPMENT

WOLVERINE HYDRO-LINE  
FOR INLINE OPERATIONS



WIDTHS 24" TO 40"  
REPEATS 10"-40" — 10"-60"

**15** COMBINATIONS  
OF EQUIPMENT AVAILABLE TO  
SERVE ALL YOUR PRINTING  
REQUIREMENTS

29TH NATIONAL PACKAGING EXPOSITION  
ATLANTIC CITY APRIL 4TH-7TH

**BOOTH 634**

## WOLVERINE

PAPER CONVERTING MACHINERY CORPORATION

18584 FITZPATRICK AVE. DETROIT, MICHIGAN • VERMONT 7-6460



variety of products using metal tubes and pointing up such features as protection against contamination, easy and dependable dispensing, assurance against leakage, shelf life, merchandising appeal and other features. *Personnel:* R. D. Eckhouse, M. Z. Post, G. F. Mullen, W. R. Rentschler, C. Kleinbeck, J. C. Steiner, W. Schroeder, N. H. House, F. Remington, L. T. Sheffield, R. E. Reed, J. E. Turner, Jr., A. W. Paull, Jr., C. Stiassni, R. F. Cox. *Hotel:* Shelburne.

**COMET INDUSTRIES, INC.** *Booth 1223.* Exhibit of automatic feed and slitter attachment for drape-type forming machine, Model Meteor; Blister-Matic machine for vacuum forming products up to 6 in. in height for cavity forming, drape forming, pressure forming and plug assist, which automatically feeds from roll stock, fully adjustable with 6 to 32 in. feed, unloads and slits in two directions and clears thermofomed parts as new cycle begins. *Personnel:* R. E. Kostur, J. E. Kostur, Sr., H. Kostur. *Hotel:* John's Motels.

**CONAPAC CORP.** *Booth 251.* Photographic displays of broad lines of package-making and converting equipment for the paper and plastic fields. *Personnel:* R. H. Schnoor, J. H. Brezinski, J. C. E. Williams, E. E. Miranda, C. F. Van Sweringen, H. Beams, K. R. Fritts, F. D. DiFranco, A. Gans, A. Moravec, J. H. Beckman, R. M. Campbell. *Hotel:* Traymore.

**COTTRELL CO.,** Sub. of Harris-Inter-type Corp. *Booth 1402.* Lee flexographic presses and Goebel slitter-rewinders displayed in color photos, diagrams and working models. *Personnel:* R. W. Rosebury, R. J. Vennard. *Hotel:* Shelburne.

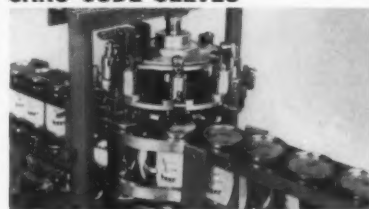
**CROWN CORK & SEAL CO., INC.** *Booths 253, 257.* Demonstration of aerosol techniques; up-to-date samples of new container designs, specifically aluminum cans for Libby, McNeill & Libby; also lug caps. *Personnel:* S. V. Tattas, E. P. Stuart, S. R. Schneible, J. J. Luviano, J. T. Hanlon, W. L. Lohrfinck, J. J. Waters, J. L. Carnie. *Hotel:* Claridge.

**CROWN ZELLERBACH CORP.** *Booths 303, 305, 313.* Display of Gaylord Container Div., Western-Waxide Div. and Multiwall Bag Sales Div. products, including wide range of corrugated cartons; semi-automatic set-up machine; 926-style box, a two-piece telescoping corrugated container; Thermo-Tape machine for in-plant closure of sewn multiwall bags with heat-sealed polyethylene tape over-sewing; new techniques in seed packaging; Crown Caddie multiwall bag; complete line of open-mouth and valve bags; boilable cook-in pouches of all constructions; latest advancements in polyethylene film bread wraps; Pouch-In-Carton for frozen fruits and berries; pouch packaging for potato chips; Moistite bags for hygroscopic materials. *Personnel:* W. J. Zellerbach, K. Wilkin, D. J. Benjamin, M. M.

## Marking Ideas for People who Package

from **GOTTSCHO**

### CANS CODE SELVES



Now—cans, jars, bottles, other basically cylindrical products actually code themselves as they travel along the line. Product flow provides motive power needed for ingeniously simple new imprinting unit called "TMT MARKOCODER®." Imprinter functions smoothly at speeds to 1000 per minute, automatically accelerates or decelerates to synchronize with product flow.

### 4 TESTS FOR PACKAGE MARKS

Whether it's a code-date, price, flavor, size or any other supplementary mark imprinted on the package at the manufacturing level it's of little value unless it is: 1. *Legible*, 2. *Permanent*, 3. *Readily visible*, 4. *In same location on each package*. Why not check your packages and see whether imprints pass these 4 tests.

### UNUSUAL USES FOR GOTTSCHO IMPRINTERS

- Big frozen food packer decided to stage "quickie" 5¢ off promotion. Used automatic imprinters on its wrapping machines to print offer right on package wraps. Gained time for maximum competitive effect, saved cost of printing special wraps.
- Need for placing "warnings" on plastic bags at time of big scare last year was real headache for converters. Solved problem, however, by installing imprinting attachments on their bag machines.
- Packager with large inventory of printed foil wrapping forced to change net weight of product recently. Used imprinters on wrapping machines to block out old weight, imprint new. Saved thousands of dollars worth of packaging material, was able to make change without delay.

### SPECIAL IMPRINTING INKS

Need an ink to imprint on cans with residual grease . . . on waxed paper . . . on the new "hard-to-print" plastic films? Gottscho has them. Ask us.

### PROGRESS

5 years ago it measured 4050 cu. inches, weighed about 100 lbs., required 12 to 15 adjustments every time copy or cutoff was changed. Today's model of same imprinter fits in just 1/30th the space (120 cu. inches),

### See Complete Line of Imprinters at Show

Don't miss the Packaging Show in Atlantic City, April 4-7. You'll see the most complete line of machines ever displayed for coding, marking and imprinting every type of package at the point of packaging. Six new machines to be shown along with redesigned and improved models of older machines.

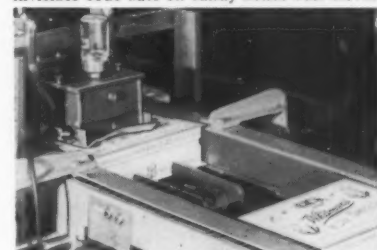
**GOTTSCHO is in BOOTH 629**

weighs only 1/20th as much (less than 5 lbs.), requires no adjusting. 1960 model makes a higher quality imprint at higher speeds, functions more efficiently with a fraction of the working parts in its prototype. What's more—it now costs 60% less.

The machine? Gottscho's "Series 700 ROLAPRINTER" imprinting attachment for wrapping, bundling, bag and pouch machines.

### INVISIBLE IMPRINTS

To see or not to see (the code-date on the package)—that is the question. At Stephen F. Whitman and Son, Inc., Philadelphia, use of invisible code-date on candy boxes best serves



company's quality control purposes. Imprint can be read when exposed to light from an ultra-violet ray lamp. Whitman uses invisible ink in standard "700 ROLAPRINTER®" mounted on box infeed of an overwrap machine to imprint boxes themselves rather than their wraps, in itself an uncommon but perfectly proper approach.

### PROPER MARKING UPS SALES

Palletized storage, dark stockrooms, employee turnover at retailer level can spell lost sales and costly returns unless shipping cases are properly marked . . . on all 4 sides. Product name, case quantity, size, variety, other information a retailer must know to stock his shelves properly should appear on all side panels so they are visible regardless of how cases are turned. Some data best preprinted on cases by boxmaker, other imprinted at point of packing. Ask Gottscho about "ROLACODER" attachments for conveyors and case-sealers to mark all 4 sides in single pass.

### LOOK MA—NO INK!

Exciting new imprinter that uses inexpensive roll-leaf instead of ink and operates like automatic typewriter is finding enthusiastic reception among packagers who use pouch machines or intermittent wrappers with short cutoffs . . . or who require absolutely permanent imprints on waxed paper or where imprint must be resistant to heat-sealing. If any of these sound like your problem you will want to know more about the "WRAPAPRINTA®" attachment for pouch and wrapping machines. Just what doctor ordered for printing unit or strip packs too.



Want more info? Check off—clip—attach to your letterhead—and mail to

**GOTTSCHO, Dept. A, Hillside 5, N. J.**

- ☐ ROLAPRINTER
- ☐ WRAPAPRINTA
- ☐ "TMT" MARKOCODER
- ☐ ROLACODER



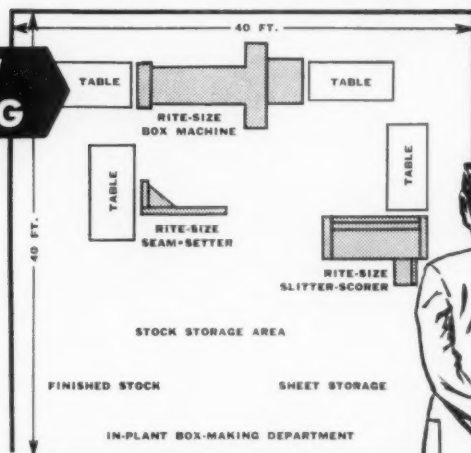
If you use corrugated boxes...in many sizes...in varying quantities...  
INVESTIGATE...

## Rite-Size "IN-PLANT" BOX MAKING

- Cuts unit cost of boxes
- Guarantees immediate availability of boxes
- Provides custom-dimensioned boxes
- Reduces box inventory investment
- Frees storage space for manufacturing

Rite-Size Equipment enables you to make corrugated boxes to your own specifications — right in your own plant! You can make the sizes and styles you need, in the quantities you need, at the time you need them. Box production can be coordinated to daily packing line requirements, if desired.

A complete Rite-Size box department consisting of box machine, printer, seam-setter and slitter-scoring, requires only 1600 sq. ft., including ample storage space. Compare this with the space now used for box inventory alone!



Improved Rite-Size Equipment is precision engineered for controlled accuracy, trouble-free dependability and simplicity of operation. A complete change in box dimensions takes only a minute and one-half. Production capacities range to 300-500 boxes per hour.

Investigate Rite-Size "in-plant" box making, today.  
Write for literature and complete details.



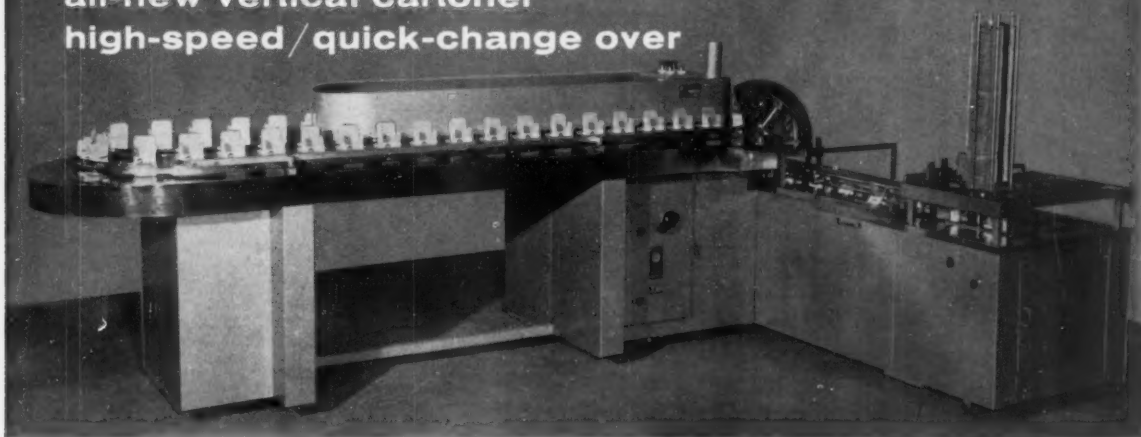
**PACKAGING MACHINERY COMPANY**

53 WASHINGTON AVENUE, CRANSTON 7, R. I.

# VERTUCK

MODEL 120

all-new vertical cartoner  
high-speed / quick-change over



**BIVANS**



**CORPORATION**

2431 Dallas Street, Los Angeles 13, California

Contact our distributor: New Jersey Machine Corp., Hoboken, Cincinnati, Chicago, Los Angeles



Jamieson, P. E. Claus, R. S. Baum, J. M. Arndt, Jr., W. H. Jennings, J. W. Kincaid, R. F. Gill, F. H. Bostock, A. D. Giles, N. McClarnan, N. Johnson, O. Johnson, R. A. Ehlers, A. P. Laissue. *Hotel: Dennis.*

CURTIS, S., & SON, INC. *Booths 928, 930, 934. Personnel:* N. G. Curtis, D. R. McCain, Jr., R. Gorton, R. Carruth, W. Wilson, J. Wheeler, T. Kay, R. Ransom, W. Earll. *Hotel: Marlborough-Blenheim.*

DAHER CO., INC. *Booth 638.* Exhibit of decorated and embossed metal containers and trays in unusual shapes and designs in full color for gift packaging of such items as fruit cakes, candies, cookies, confectionery, tea, nuts, golf balls, handkerchiefs, writing paper, etc.; also exclusive and custom designs. *Personnel:* B. Greenstein, C. Molk, W. Blum. *Hotel: Ritz Carlton.*

DELAWARE BARREL & DRUM CO. *Booths 937, 1038.* Exhibit of molded polyethylene returnable and single-trip drums; also molded polyethylene tanks. *Personnel:* J. S. Heisler, B. J. Loberman, R. Luff, J. Barber, G. Coughlin. *Hotel: Shelburne.*

DENNISON MFG. CO. *Booth 534.* Exhibit of Therimage heat-transfer labeling machines; Dial-Set imprinting machines; a heat-seal banding machine for cylindrical items; a hot-melt adhesive applicator; also a pressure-sensitive label dispenser. *Personnel:* R. B. Hulett, E. P. Lingham, H. E. Webster, W. H. Hubbard, J. F. Frazier, J. F. Card, W. D. Wilson, H. C. Weeks. *Hotel: Marlborough-Blenheim.*

DEPENDABLE COMPRESSOR & MACHINE CO., INC. *Booths 1230, 1232.* Screen printing machines on display. *Personnel:* C. F. Eisen, A. Eisen, A. Broemel. *Hotel: Dennis.*

DERBY SEALERS, INC. *Booth 325.* Display of Dispens-A-Ply product labeler which strips pressure-sensitive labels from a roll of backing paper and applies them to products automatically; new "L" series of manual, lever-operated and electrically operated pressure-sensitive label dispensers; also representative equipment from company line of dispensers for water-soluble gummed and pressure-sensitive tape. *Personnel:* A. P. Krueger, W. J. Eilerman, W. C. Beecher, J. J. Lowe, P. J. De Michiel, M. B. Fabian, H. Schluter, R. Blankshain, R. J. Reilly. *Hotel: Shelburne.*

DIAMOND PLASTICS INDUSTRIES, INC. *Booths 1405, 1407.* Exhibit of rigid plastic box and rigid plastic packaging; vacuum forming; pressure forming; folding and set-up paper boxes. *Personnel:* R. Gayle, M. Beck, M. Rosenstein, H. Trabilsy, A. J. Monaco, W. Gold, J. Birger, E. Garrison, M. De Vietien, D. Fobes. *Hotel: Traymore.*

DISPENS-A-LABEL DEVICES. *Booth 656.* Newest label moisteners to be ex-

HIGH SPEED

LOWEST COST

## FILLMASTER

vibratory filler

"Vibratory for weight accuracy"

for dry, semi-dry, free-flowing or slow-flowing products

Here's a filling machine that gives you everything up to 60 bags, cartons or packages a minute, from gram fractions to 10 pounds. Precise weight accuracy is assured by the exclusive Fillmaster vibratory action. Nuts, candy, popcorn, etc.—even the most delicate product is handled with ease, without damaging or bruising.

You can change from one product to another and from one container size to another in minutes. And, the Fillmaster is so easy to operate, that even an inexperienced operator will get full production.

High priced? No, the low cost for a machine of this caliber will surprise you. Get the facts today . . . write for literature and prices.

Ask us about our automatic fillers also.

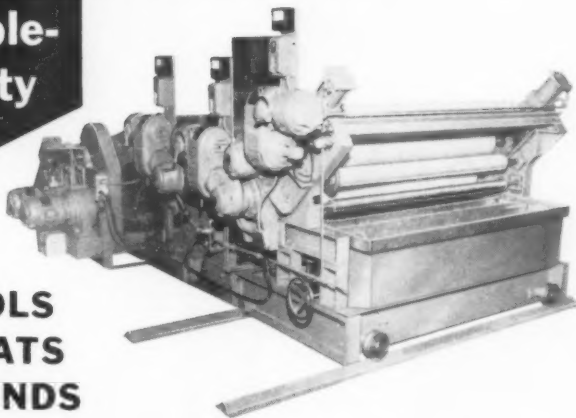
**STUYVESANT  
ENGINEERING COMPANY**

107 Stuyvesant Avenue, Lyndhurst, N.J.



## FILM HAUL-OFF

triple-duty



COOLS  
TREATS  
REWINDS

For uniform quality at low-cost during the critical final stages of polyethylene and other film processing. Components include: (a) Bath-type cooling or casting roll units, (b) film treating slitting unit, (c) turret rewind with automatic cut off. Each component section is track mounted and equipped with its own variable speed drive to assure uniform film tension control. Hard straight edge rolls without telescoping.

There is only one Lembo Machine! Be cautious of "Lembo-type" imitations.

**LEMBO**  
MACHINE WORKS, INCORPORATED

248 EAST 17TH STREET  
PATERSON 4, NEW JERSEY  
LAMBERT 5-5555  
Cable Address: Lemco, Paterson  
Mfr. PRESSES - EMBOSERS  
LAMINATORS - ROLLERS



AIR-BORNE SERVICE  
Private fleet speeds our engineers  
and field service experts to you.



Got a **SLITTING** problem?

**Stanford SOLVES it!**

with the Model 182

**Combination SLITTER and  
DOCTOR MACHINE**

*Ideal for All  
Web Materials*

This versatile, low-cost Double-Arbor Doctor Machine will help you break costly slitting "bottlenecks". Precision-engineered and ruggedly built, it works two ways to speed production slitting!

- 1 Performs all trimming, rewinding, and other salvage operations, converting reject rolls into saleable stock.
- 2 Handles short-run and small-size slitting jobs at fractional cost—has dual windup shafts for multiple slitting.

- up to 30" wide roll, 14" diameter
- automatic web guide
- automatic constant tension control
- speeds up to 1000 f.p.m.

Write for illustrated brochure

Symbol of Superiority in Converting Equipment

**Stanford ENGINEERING COMPANY**  
SALEM, ILLINOIS • PHONE: SALEM 553

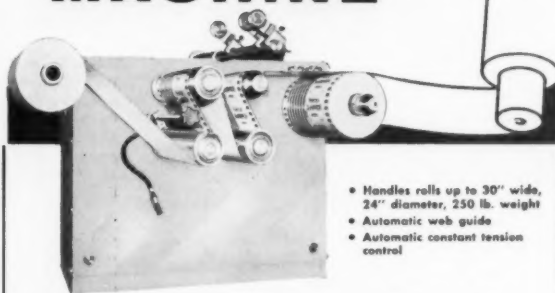
Canadian Rep.: Gordon Keats, 133 Flora Dr., Scarborough, Ont.  
Manufacturers of Slitters, Web Guides and Rewinding and Constant Tension Equipment

Got a **REWIND** problem?

**Stanford SOLVES it!**

with the Model 140

**DOCTOR  
MACHINE**



- Handles rolls up to 30" wide, 24" diameter, 250 lb. weight
- Automatic web guide
- Automatic constant tension control

Quick, economical way to convert defective rolls into saleable stock! This compact Stanford Doctor Machine easily corrects soft, telescoped, uneven, or out-of-register rolls without tying up your production equipment. Saves many times its own cost in material and labor.

Stanford... Symbol of Superiority in Converting Equipment

UNCONDITIONALLY GUARANTEED TO DO THE JOB  
WRITE FOR ILLUSTRATED BROCHURE

**Stanford ENGINEERING COMPANY**  
SALEM, ILLINOIS • PHONE: SALEM 553

Canadian Rep.: Gordon Keats, 133 Flora Dr., Scarborough, Ont.  
Manufacturers of Slitters, Web Guides and Rewinding and Constant Tension Equipment

# Successful Vacuum-Formed Sales Packages

These vacuum-formed blister packages represent the versatility which Plastic Enterprises employs to create new designs to meet unique packaging requirements. These carded blister packs afford full visibility, eye-appeal, purpose and economy.

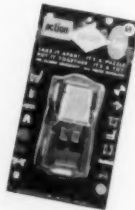
designed... engineered... and produced by us -



Deep drawn acetate blister, heat-sealed to card. An inexpensive package that can be assembled with low-cost equipment in your plant, or we can do entire job in our full-equipped assembly plant.



Blister pack designed for display by either hanging on rack or standing on counter.



Acetate blister pack for toy items. Blister, held by die cut fold-over latex-backed card, requires no assembly equipment.



Merchandising display produced from high-impact polystyrene, clear styrene strips affixed to front holds glasses in place.

**PLASTIC ENTERPRISES**

124-14 22nd Avenue, College Point, N.Y. INdependence 3-7700

SEE US AT OUR BOOTH #1524—

AT THE 29TH PACKAGING EXPOSITION!



hibited. *Personnel:* I. V. Lorini, A. Ferrato.

**DOBECKMUN CO.**, A Div. of The Dow Chemical Co. *Booth 435.* Saran wrap, Tycite and Polyfilm in both converted and unconverted form will be featured, as well as other laminated and extruded products; a "What's New" section; also Packaging Institute's 1959 Corporate Award winning package for surgical sutures. *Personnel:* R. S. Jones, W. J. Bader, R. A. Hickman, K. Prindle, W. L. Lenox, W. Troph, E. Schimkole, G. J. Klusmire, P. Collins, D. Burton, R. Reed, F. Dulmage. *Hotel:* Claridge.

**DOSAMATIC DROPPER CORP.** *Booth 1206.* Exhibit of droppers and caps adjustable to dispense predetermined quantities and/or doses, containing built-in primary seals and applicable to all liquid products, particularly in food and drug lines. *Personnel:* G. Ballin, N. Maslow. *Hotel:* Empress Motel.

**DOUGHBOY INDUSTRIES, INC.** *Booth 603.* Exhibit of packaging machinery specializing in heat sealing, including three new machines. *Personnel:* E. R. Livingston, H. Weatherhead, J. Grevich, J. Johnston. *Hotel:* Ambassador.

**DU PONT, E. I., DE NEMOURS & CO., INC.**, "Cel-O-Seal" Cellulose Band Div. *Booth 456.* Containers featuring "Cel-O-Seal" cellulose bands as secondary closures to aid merchandising impact and prevent tampering or lid break-off during shipping and customer handling. *Personnel:* M. V. Noble, T. W. Holland, E. A. Britton, D. R. Kinloch, R. L. Smith, H. E. Walther. *Hotel:* Dennis.

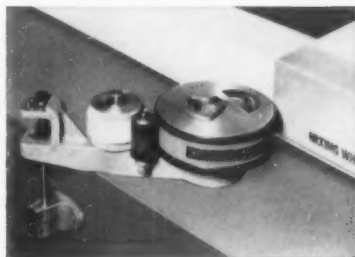
**DU PONT, E. I., DE NEMOURS & CO., INC.**, Film Dept. *Booth 464.* Several hundred products packaged in new adoptions of the company's films, including standard and polymer-coated cellophane, polyethylene and Mylar; featured theme "What's New in Film Packaging." *Personnel:* R. R. Smith, R. C. Myers, H. D. Chickering, R. C. Krueger, H. L. Taylor, J. K. Goundie, F. W. Tranfield, J. B. Phillips, P. L. Frederick, R. J. Crowley, M. H. Wheat, K. M. Scheu. *Hotel:* Dennis.

**DU PONT, E. I., DE NEMOURS & CO., INC.**, Freon Div. *Booth 454.* "Freon" safe propellants featured. *Personnel:* A. H. Lawrence, F. T. Reed, T. D. Johnson, C. S. Oldach, C. Wirth.

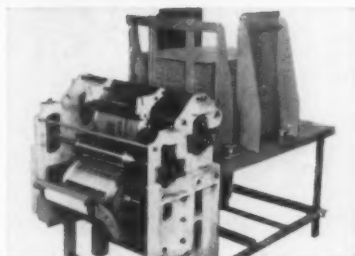
**DU PONT, E. I., DE NEMOURS & CO., INC.**, Polychemicals Dept. *Booths 434, 438, 535, 537.* Display of extrusion coating with Alathon polyethylene resin; molded containers of Alathon; aerosol containers of Delrin acetal resin. *Personnel:* E. S. Davis, A. A. Pavlic, H. S. Lecky. *Hotel:* Chalfonte-Haddon Hall.

**DUSENBERY, JOHN, CO., INC.** *Booth 1041.* Exhibit of slitter-rewinders; paper-film-foil laminator; tension indicators; also core cutters. *Personnel:* J. Dusen-

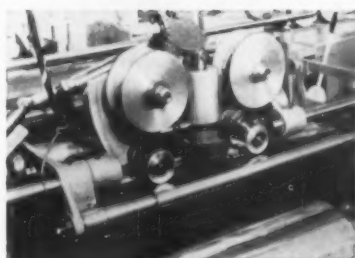
## Make these IME machines your standard for comparison in marking, dating and coding equipment



**WHIPPET MARKER®** automates imprinting of conveyor-carried containers of all types. Driven by the conveyor and self-inking, it marks your containers as you use them. Attaches easily to any conveyor line.



**#7 AUTOPRINTER®** automatically imprints one or both sides of cartons and multi wall bags at speeds up to 3000 per hour. Prints clear impressions on any flat, absorbent surface regardless of minor surface variations.



**RAINBOW CODER®** offers you a wide color range in sharp, clear, controlled impressions on any surface that will accept hot roll leaf imprinting. Designed to be synchronized with speed of the packaging machine, it requires no operator, no ink, no makeready and very little maintenance.

Before you buy any marking or imprinting machine be sure to check on the I. M. E. line. These machines set the standards . . . for speed . . . for versatility . . . for rugged durability . . . for accurate, clear imprinting. You can find cheaper machines, but you can't find better dollar-for-dollar value in long-run economy and trouble-free, efficient service! Write today for our new catalog — it's yours for the asking. Department M.P.



**UNUSUAL PROBLEM?** If you have a special problem in product handling or identification, remember this: IME offers complete design and engineering services.

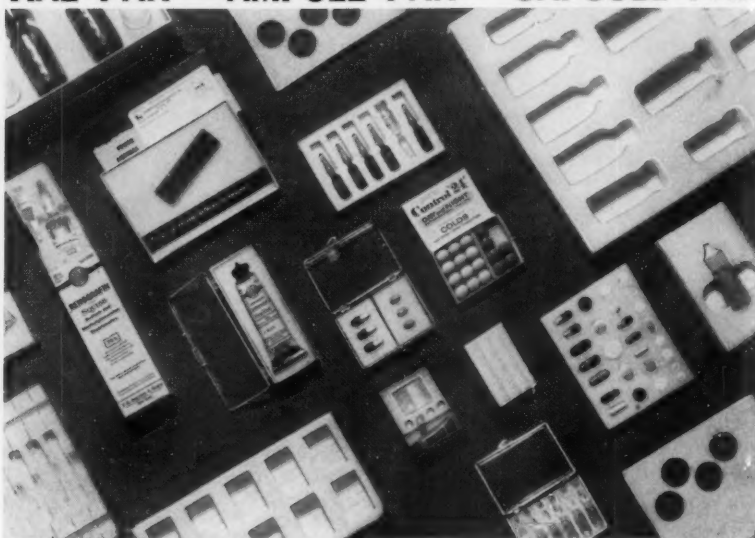
# ime

**INDUSTRIAL MARKING EQUIPMENT**

**655 BERRIMAN ST. | company, inc.  
BROOKLYN 8, N.Y. | NI 9-3305**



## VIAL PAK • AMPULE PAK • CAPSULE PAK



**FLAKE-FREE Lightweight**

# STYROFOAM

FABRICATED OR MOLDED

Accepted As An Integral Part  
Of Many Packages

See us at Booth 1519  
April 4-7 Atlantic City

WIRE . . . WRITE . . . PHONE for Samples and New Ideas

**PACKAGING COMPONENTS, INC.**

171 Madison Ave., N.Y. 16, N.Y. MU 9-7665

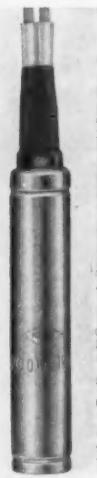
**FOAMPAK CORPORATION: Factory**

400 N. 12th St., Phila. 23, Pa. Walnut 2-0660

## CARTRIDGE HEATING UNITS

with NON-OXIDIZING STAINLESS STEEL SHEATH

**For  
PACKAGE  
SEALING  
  
PLASTIC  
STAMPING  
and  
FORMING  
  
Durable  
Dependable**



For sealing irons, heater bars, dies, packaging machinery, platens—wherever even, concentrated heat is desired, Ogden's Cartridge Heating Units are ideal. Stainless steel sheath won't oxidize to impede heat as brass does; gives better conduction. Longer life cuts costly down-time and replacements. In 115 or 230 volts; sizes 5/16" to 1-1/4" O.D.—precision machined for best heat contact. All popular cartridge sizes carried in stock.

Also available in "MIGHTY WATT" construction for high heat concentration in smaller areas, for increased production.

Our engineers will help you with any problem involving use of heating elements. Send for details.



**OGDEN Manufacturing Co.**

2520 IRVING PARK ROAD

CHICAGO 18, ILL. • Phone CO 7-2225

Representatives in Principal Cities

Automatic Coil Winding • Cartridge, Strip, Mica and Porcelain-Type Heating Elements

bery, R. Young, J. Rienau, F. Brombacher, H. Hunt, F. Kerber.

**EASTERN CORRUGATED CONTAINER CORP.** Booth 1409. Joint exhibit with affiliates Tri-City Container Corp. and Commonwealth Container Corp., featuring wide range of corrugated containers; die-cut specialty items; prefabricated built-up pads and corner pieces; non-skid cartons; Cor-a-Pel processed board; also Tufedge corrugated board. *Personnel:* P. Densen, A. Greene, E. Boughton, E. Kwartler, N. E. Giannini, E. Hertzmark, H. Jonkman, R. Platt, N. Maurer, M. Horowitz, R. Jackson, C. Buckholtz, H. Katz, R. De Piro, H. Hurwitz, C. Monica. *Hotel:* Traymore.

**EASTMAN CHEMICAL PRODUCTS, INC.** Booth 304. Demonstration of overwrapping with polyethylene film; also assortment of packages using Tenite acetate, butyrate and polyethylene. *Personnel:* D. C. Williams, E. C. Cathcart, P. C. Underwood, D. C. Guthrie, V. Reisig, E. P. Ervin, L. W. A. Meyer, H. M. Maho, C. B. Fox, Jr., J. Adams, W. F. Cooper, W. E. Sweeney, W. L. Searles, C. W. White, R. H. Cording, J. M. Marvin, L. B. Connelly, H. D. Oliver, T. E. Dudley, J. F. Hill, G. K. Travis, T. L. Loveless, J. T. Bent, J. L. Reynolds, T. H. Howard, J. G. Slater, J. A. Deal, J. B. Williams, W. R. Groover. *Hotel:* Traymore.

**EASTMAN KODAK CO.** Booths 556, 560. Display of transparent packages fabricated and thermoformed from Kodapak I (cellulose acetate), Kodapak IV (cellulose triacetate), Kodacel A-29 (cellulose acetate) and extruded Kodapak II sheet (cellulose acetate butyrate); also new uses for plastic sheet and unusual applications for Kodapak sheet. *Personnel:* C. D. Sneed, S. D. Osman, V. M. Howe, P. U. Braman, J. E. Gruntler, R. Caire, N. F. Phillips, F. C. Richner, W. Goodnow, T. Lyons, M. F. Tucker, W. J. Seaman, E. M. Drummond, J. B. Watkins. *Hotel:* Dennis.

**EKCO-ALCOA CONTAINERS INC.** Booth 345. Hermetic sealing equipment for rigid aluminum-foil containers featured. *Personnel:* R. W. Simmons, J. W. Dirksen, A. Moses, T. Leo, R. Gaulke. *Hotel:* Shelburne.

**ELECTRONIC MACHINE PARTS, INC.** Booth 368. Exhibit of photo-electric registration control equipment; complete line of units covering applications for intermittent or continuous rotary machines involving localization, spot cutting or synchronization; new line of double differentials ranging from 1 to 10 h.p. applicable to bag machines and tubers. *Personnel:* W. T. McAdam, A. Handal, G. Geras. *Hotel:* Shelburne.

**EMHART MFG. CO., Portland Div.** Booths 640, 642. New Type 163 plastic container pressure former will be shown forming such containers as ice-cream or cottage-cheese tubs from sheet plastic



# Clark-Aiken

FROM ROLL TO PACKAGE your profit picture is vastly improved with finishing room equipment designed to your requirements

by *Clark-Aiken*

at the **AMA PACKAGING EXPOSITION**

# FINISHING

# ROOM

# AUTOMATION

# OFFERS

# BIG, NEW

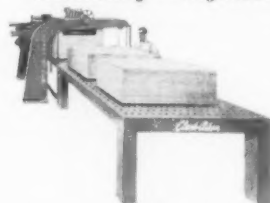
# PROFIT HORIZONS



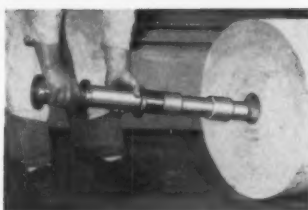
... watch the new **TYPE G CUTTER-PILER** in action--demonstrating fast, economical registration and general purpose sheeting.



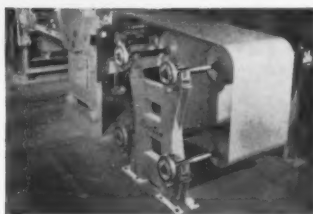
... learn how Clark-Aiken's new line of **LIFT TABLES** expedite materials handling anywhere in the shop—and for the first time see the all new **AIR TABLE**—typical of the many Clark-Aiken innovations in finishing room machinery—engineered for



fast, efficient pile removal, transfer and packaging.



... you'll recognize the possibilities for greater production afforded by the improved Clark-Aiken **STUB ARBOR** that speeds roll changeovers and cuts labor costs.



... you'll see demonstrated, on one of Clark-Aiken's many models of custom built **ROLL STANDS**, a refined, more effective braking system for fast, positive cutter feeding from rolls.

you'll discover how when you visit **BOOTH 597** at the **AMA PACKAGING EXPOSITION** in Atlantic City Auditorium, **APRIL 4TH** through **7TH**... and see for yourself.

the *Clark-Aiken* COMPANY, 795 HART AVE., Lee, Massachusetts

CANADIAN REPRESENTATIVE:  
GORDON W. KEATES,  
133 FLORIDA DRIVE,  
SCARBOROUGH, ONTARIO



# 8 "BIG"

## ADVANTAGES OF LUSTEROID PLASTIC CONTAINERS

Crystal-clear for better product display at points-of sale... for better "eye appeal" to step up the buying urge. Here are Lusteroid's added plus values.



- PRODUCT PROTECTION  
— no glass hazards
- LESS PACKAGING COSTS  
— low unit cost
- REDUCED LABELING EXPENSE  
— print right on Lusteroid
- CUT EXTRA PACKING COSTS  
— no breakage loss
- LOWER SHIPPING RATES  
— low unit weight
- REASONABLE MINIMUM ORDERS  
— small quantities available
- PROMPT DELIVERIES  
— flexible production facilities

Full range of styles and sizes in crystal-clear, opaque, or colors.

**LUSTEROID — THE PERFECT CONTAINERS FOR SMALL PRODUCTS IN ANY FORM**

Send for bulletin

**LUSTEROID**  
CONTAINER COMPANY, INC.

10 West Parker Avenue  
Maplewood, New Jersey  
South Orange 2-5779

fed from rolls which will blank the piece, form it and deliver to a filling machine or stack it, and which will also chop up waste. *Personnel:* W. W. Lauer, L. E. Johnson, E. K. Graves, K. Holstebro, S. W. Capper, A. L. Johnson, W. C. Lemon, S. Knapp, D. T. Taff, E. Dombroski, J. W. Hull. *Hotel:* Chalfonte-Haddon Hall.

ENJAY CO., INC. *Booth 1201.* Escon polypropylene film to be demonstrated on overwrap machinery. *Personnel:* H. G. Boynton, W. J. A. Conner, J. E. Dolan, W. L. Dunkel, J. R. Eagle, H. C. Evans, C. E. Fornswoth, D. R. Hammel, J. A. Mazmanian, R. J. Munns, H. W. Peterson, C. W. Virgin. *Hotel:* Traymore.

ERDCO ENGINEERING CORP. *Booth 1446.* Clear-Pak, Jr., plastic-bubble sealing machine featured. *Personnel:* J. T. Shartle, E. K. Nelson, J. S. Bogen. *Hotel:* Chalfonte-Haddon Hall.

ERIEZ MFG. CO. *Booth 1309.* Exhibit of Hi-Vi vibratory feeders and bin vibrators; magnetic conveying and elevating equipment; also magnetic separators. *Personnel:* M. L. Cramer, N. Hirt, R. W. Shively. *Hotel:* Shelburne.

ERRICH INTERNATIONAL CORP. *Booth 1001.* Demonstration of new Model 813 stainless steel Speedy Bag Packager with retractable air generator for food and allied industries, using both polyethylene and Cryovac bags; also Models 7-09 and 11-17 Speedy Auto-Bag which automatically seals, trims and disposes of trimmed residue of the bag; also special Publication Bagger now being used by *New York Times* for loading Sunday edition in polyethylene bags. *Personnel:* M. L. Ruderman, H. Bitterman, A. Kutner, P. Laskow, P. Lavitt, G. Jacobs, R. Shafran. *Hotel:* Castlebrook Motel.

ERTEL ENGINEERING CORP. *Booth 901.* Display of liquid-handling equipment such as plate and frame filter, enclosed cylinder disk-type filter with self-tightening feature, portable bottle-filling machines with handles, pumps, spouts and asbestos filter sheets; new Model EGR gravity filler. *Personnel:* F. J. K. Ertel, G. P. Vogel, W. J. Kiernan, Jr. *Hotel:* Claridge.

FMC PACKAGING MACHINERY DIV., Food Machinery & Chemical Corp. (See Stokes & Smith, Hudson-Sharp, Simplex, Kingsbury & Davis.)

FACILE CORP., Div. of Sun Chemical Corp. *Booths 542, 546.* Innovations in extrusion tapes; wide variety of flexible packaging materials including bows, ribbons, tapes and other decorative packaging materials; also protective tarpaulins. *Hotel:* Shelburne.

FELINS TYING MACHINE CO. *Booth 129.* Display of two models of Pak Tyers for tying packages, boxes, bundles from ½ to 16 in. in height without any length or width limitations, one model featuring automatic table

trip; the other, foot-treadle trip. *Personnel:* H. Kohler, W. McCambridge, D. Larson, H. Keller, P. Gross. *Hotel:* Ambassador.

FINDLEY, F. G., CO. *Booth 204.* Joint exhibit with Southern Adhesives Corp. and Union Paste Co., featuring advantages offered by wide range of packaging and converting adhesives; typical packaged and converted products on which adhesives are used; new concepts in automatic case sealing for users of corrugated and solid fibre shipping containers; sales and technical personnel on hand to discuss packaging problems and status of these adhesives as applied to current F&DA legislation. *Personnel:* R. Findley, O. Bronn, C. Bickel, H. Fedler. *Hotel:* Saxony Motel.

FISCHBEIN, DAVE, CO. *Booth 157.* Demonstration and display of bag-closing machines for closing filled textile and multiwall paper bags, from portables to belt-conveyor units. *Personnel:* H. Fischbein, G. Fischbein, S. Shark. *Hotel:* Dennis.

FLEX-O-GLASS, INC. *Booth 1530.* Packaging plastics on display, including butyrate, rigid and regular vinyl, polyethylene for skin or bubble packages. *Personnel:* K. Boehm, J. Kraft, K. Morris, C. Waddell. *Hotel:* Lombardy Motel.

FOAMPAK CORP., Packaging Components. *Booth 1519.* Fabricated Styrofoam and molded polystyrene foam on display. *Personnel:* T. H. Barnett, L. N. Barnett, J. Kramer, Joyce Kramer, F. Harris, I. Lihn, T. Bispham. *Hotel:* Traymore.

FRANK, WALTER, ORGANIZATION. *Booth 1513.* Demonstration of new-type screening operation on plastic containers; display of recent packages designed for drug, cosmetic, household-chemical and housewares fields. *Personnel:* W. R. Frank, J. N. Michell, J. J. Eder. *Hotel:* Claridge.

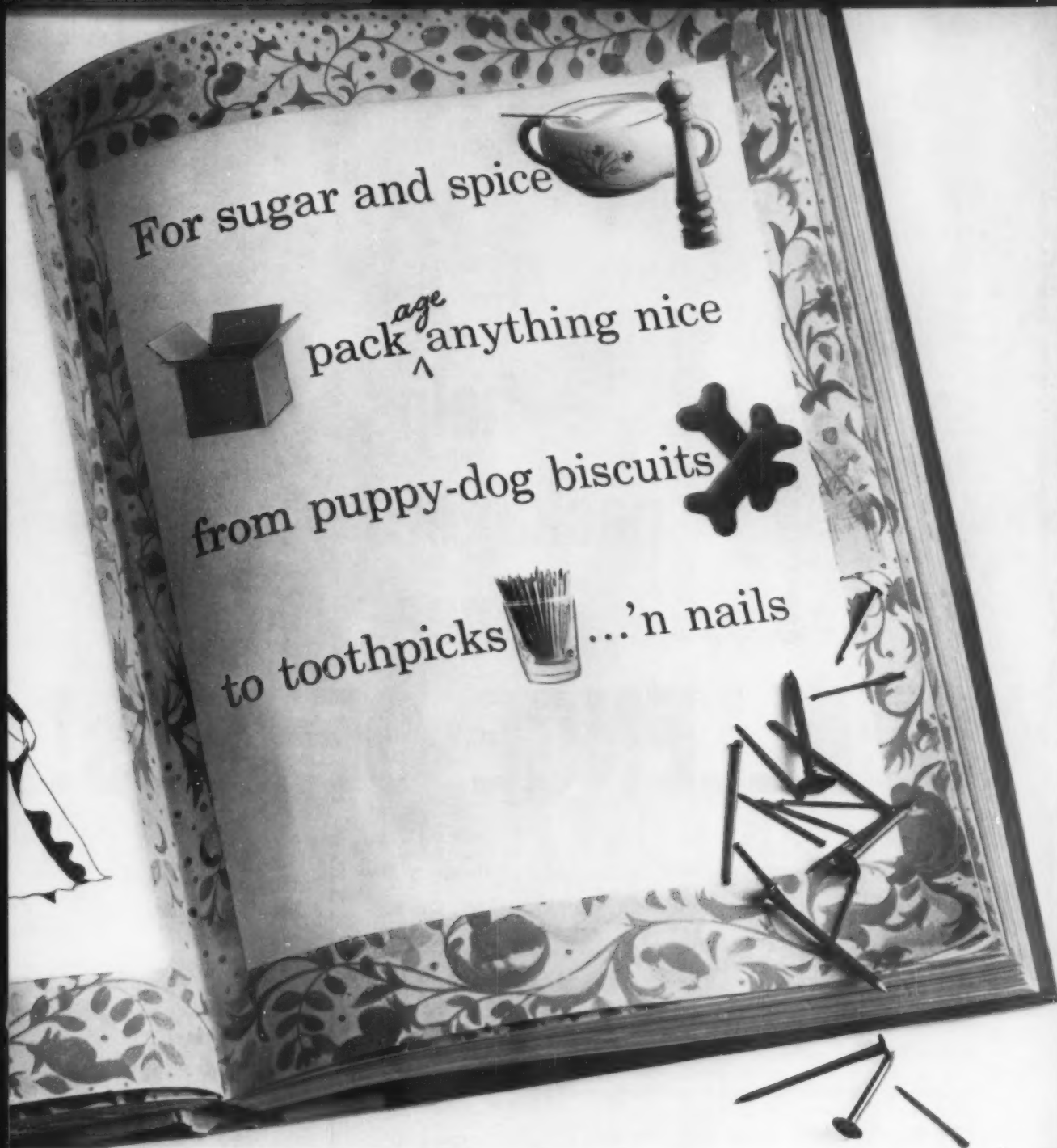
FULLER, H. B., CO. *Booth 1218.* Exhibit of new adhesive products used by packaging firms; literature to be available on development of new products. *Personnel:* E. A. Vigard, R. E. Smith, R. B. Jamison, N. Liggett. *Hotel:* Traymore.

GPE CONTROLS, INC. *Booth 659.* Display of new reflected-light line follower with guide roll; web width indicator using photo-electric means of tracking web, with indicator reading out web width continuously and output recorded or used to operate quality control, alarms, etc.; unwind stand web guide using pneumatic sensing. *Personnel:* D. B. Digel, J. M. Deering, S. L. Sorsen, T. G. Watkins, W. G. Mueller, E. H. Schroeder. *Hotel:* Shelburne.

GENERAL CHEMICAL DIV., Allied Chemical Corp. (See Allied Chemical.)

GENERAL PRINTING INK CO., Div.





...that's what **UB** cartons are made for!

**BOARD MILLS**—Thomson, New York. Lockport, New York. Urbana, Ohio. **CARTON PLANTS**—Victory Mills, New York. Syracuse, New York. Springfield, Ohio. Ridgefield Park, New Jersey. **CORRUGATED PLANT**—Ridgefield Park, New Jersey. **LAMINATING PLANT**—Victory Mills, New York  
**SALES OFFICES**—Albany, New York. Boston, Massachusetts. Buffalo, New York. Chicago, Illinois. Cincinnati, Ohio. Cleveland, Ohio. Lockport, New York. New York, New York. Ridgefield Park, New Jersey. Rochester, New York. Springfield, Ohio. Syracuse, New York. Urbana, Ohio. Victory Mills, New York.

**FAMOUS PRODUCTS GO TO MARKET IN UB CARTONS**

**UNITED BOARD AND CARTON CORPORATION**

Two Park Ave., New York 16, N. Y.





NEW 1960 MODERN PACKAGING ENCYCLOPEDIA ISSUE

# helps packagers meet CHALLENGE OF '60s!

According to forecast, growth of the packaging industry in the 1960's promises tremendous opportunities for packagers. This success will stem from three frontier areas: advances along the technical and technological route—new materials and methods—and packaging efficiency. The latter encompasses package design and production and includes all the strategic uses of packages in the modern merchandising and marketing concept.

To help you keep apace with the field's swift, ever-changing and intensely-competitive whirligig, the Encyclopedia Issue presents 34 new, informative articles covering and *carefully defining* these subjects of importance and vital interest to you.

In addition to the 34 new articles, your new 1960 Modern Packaging Encyclopedia Issue has been completely revised and updated so as to provide you with the most inclusive reference work on packaging available.

#### Check these Highlights:

- Production Challenges Ahead
- Packaging Highlights
- Meeting the Food & Drug Administration Requirements
- Interpreting Properties Ratings of Films
- Polypropylene Film
- Oriented Polystyrene Film
- Using Multipacks to Increase Sales
- New Folding Box Developments
- Advances in Plastic Bottles, Jars and Tubes
- Foam Plastics
- Advances in Aerosols
- Engineering the Packaging Line
- New Challenges in Cartoning Equipment
- Military Packaging
- Using Wirebounds Successfully
- Packaging Techniques for Gripping, Separating, Grouping



a new look  
for carbonated  
drinks!



## the FLAVOR LOK seal

*puts sparkle on the cap...  
keeps sparkle in the drink!*

### NEATER!

Gone are the dull stoppers that spoil the appearance of carbonated drinks. Now Bottlers can have bright FLAVOR-LOK seals that are neater and more efficient. Two types are available: 31-CT with continuous thread, and 31-3ST with a three start thread.

### EASILY APPLIED!

FLAVOR-LOK seals are made by the makers of R.O. (rolled-on) seals, and a similar process of application is used for threading this new seal. Machines are available for hand or automatic sealing, the latter being integrated with the filling machine. Each seal is a tailor-made fit to the bottle it caps!

### FOR EXTERNAL THREAD BOTTLES!

Each capping uses a fresh seal: a hygienic advantage that appeals to consumers.

*If you would like to investigate the benefits of FLAVOR-LOK seals on your carbonated drinks, please write for samples and prices.*

### METAL CLOSURES LTD

Bromford Lane · West Bromwich · Staffs Tel: West Bromwich 1786  
Telex: 33322 Grams: "Closures" West Bromwich  
London Office: 40 Brook St., W.1

another





masters  
in the field of  
**COLOR**



**ROSPIGLIOSI CUP BY CELLINI**  
*One of the great craftsmen of the world, Benvenuto Cellini (1500 — 1571) was a metal worker, sculptor and artist. Many of his masterpieces can be seen in museums . . . where they still dazzle viewers with their exquisite splendor.*

The beauty and perfection of a Cellini cup is immediately apparent . . . but in color formulating, fine craftsmanship is revealed only during and after the molding, extruding or forming operations. In addition to resisting migration, Westchester thermoplastic colors must satisfy severe standards of machine performance . . . such as excellent flow, uniform melting and stability under high heats. Established over the 14 years that we have been servicing the thermoplastics industry, these standards have guided the formulation of more than 4000 different commercially used color concentrates and pre-mixed color blends!

Write now for detailed information on any color problem involving linear and conventional polyethylenes, polypropylenes, and other thermoplastics.

**APPROVED FOR FOOD, DRUG  
AND COSMETIC PACKAGING**

A new series of FDA certified WESTCHESTER colors is now available. These colors are supplied with a registration number, attesting FDA approval of the pigments.



**\*WESTCHESTER PLASTICS, Inc.**

326 WAVERLY AVENUE, MAMARONECK, N. Y. • OWens 8-7410  
Custom Compounders of Polyethylene Molding Powder and other Thermoplastic Materials  
Manufacturer and Developers of Unicolor and Formacolor \*Pliothene, Formacolor, Unicolor® T.M. Reg. U.S. Pat. Off.



of Sun Chemical Corp. *Booths 542, 546.* Cross-section of package designs displaying printing by letterpress, flexography, rotogravure and offset lithography; complete line of containers, including prize winners. *Personnel:* N. E. Alexander, A. Bouffard, J. S. Thome, M. J. Hoover, G. T. West, C. E. Fast, M. B. Lousin, S. Shapiro, C. A. Aloia, F. Marra, L. Van Deusen, L. J. Gaspari, E. Craig, F. Morris, M. Gross, J. Romaska, D. Beaverson, F. Schafer, R. Bensing, J. Plunkett. *Hotel:* Shelburne.

**GENERAL RESEARCH & SUPPLY CO.** *Booths 1240, 1242.* Automatic silk-screen printing machine on display. *Personnel:* H. J. Nies, J. A. Black, F. Porth. *Hotel:* Ritz-Carlton.

**GEVEKE & CO., INC.** *Booth 142.* Exhibit of Helix rotogravure press to print flexible packaging materials such as cellophane, polyethylene, papers and foils from roll to roll. *Personnel:* A. Heybroek, J. Herrmann, E. Herrmann, P. M. Pottetti, A. Falk. *Hotel:* Chalfonte-Haddon Hall.

**GLASSINE & GREASEPROOF MFRS. ASSN.** *Booth 104.* Display of the end uses for a broad variety of protective papers including grease protective, moisture protective, aroma- and flavor-protective, with provision for wet strength and for high-speed production and industrial applications. *Personnel:* P. S. Barnhart.

**GOODYEAR TIRE & RUBBER CO.** *Booth 441.* Exhibit of packages in Pliofilm, Vitafilm and Videne TC; automatic machine packaging of products in Vitafilm; new 65 BG Pliofilm designed for bread packaging; also technical assistance available. *Personnel:* E. H. Dours, J. J. Tiernan, E. C. Randall, C. R. Denbrock, E. F. Latta, W. A. Perry, Jr. *Hotel:* Dennis.

**GOTTSCHO, ADOLPH, INC.** *Booth 629.* Exhibit of new Markomatic A for coding packages on intermittent lines; new TMT Markocoder for imprinting top of cans, jars, bottles at speeds to 1,000 per minute; new 450 Rolacoder attachment for roll-through labeling machines that code dates wrap-around labels on cans and bottles; new 210 Rolacoder for automatic coding of shipping cases on rear end during conveying or sealing; new 790 Rolaprinter for placing high-quality, precisely located imprints on side surface of cartons, cases, cans, crates, etc.; newly improved 700 Rolaprinter; the Wrapaprinta; the 300 Rolacoder; also TB Markocoder. *Personnel:* I. Gottscho, E. J. Coughlin, C. Plasko, W. E. Haberland, P. Taylor, W. Tofel, L. Ziegler, F. Meninger, H. R. Lamken. *Hotel:* LaConcha.

**GRACE, W. R., & CO., Polymer Chemicals Div.** *Booths 1209, 1312.* Exhibit of machinery showing production of film by casting method; also new blow-molded hollow objects and injection-molded items. *Personnel:* T. T. Miller, E. E. Winne, W. R. Donaldson, G. C.



Cel-Fibe wadding stays "factory fresh" in a sealed plastic bag within the stock sample carton, until ready to be removed for testing.

## With CEL-FIBE® Wadding... the proof is in the package

Systematic sampling is a new convenience in making your own performance tests of Cel-Fibe superior cellulose wadding, a complete line of versatile materials—plain or embossed, bleached or unbleached, moisture resistant or absorbent—for padding, cushioning, bracing, blanketing, and surface protection during shipping, handling, and storage.

Without waiting for a sample requisition to be processed through the mill, your distributor will furnish you with a carton holding a generous roll of Cel-Fibe wadding in the form most suitable to your application. In your own plant, you can see why "success is certain with Cel-Fibe" in meeting civilian needs and military specifications for protective packaging:

- *Softness* — non-abrasive, to safeguard fine finishes and delicate surfaces
- *Strength* — to brace package contents, avoid rejects and returns
- *Continuing bulk* — to resist stress and recover from compression
- *Neutral pH* — and low sulfur content to keep metals from corroding
- *Easy handling* — pliability, no mess in wrapping or in unwrapping
- *Easy maintenance* — no dusting or powdering, less clean-up time
- *Economy* — savings in time and labor, materials and handling stages

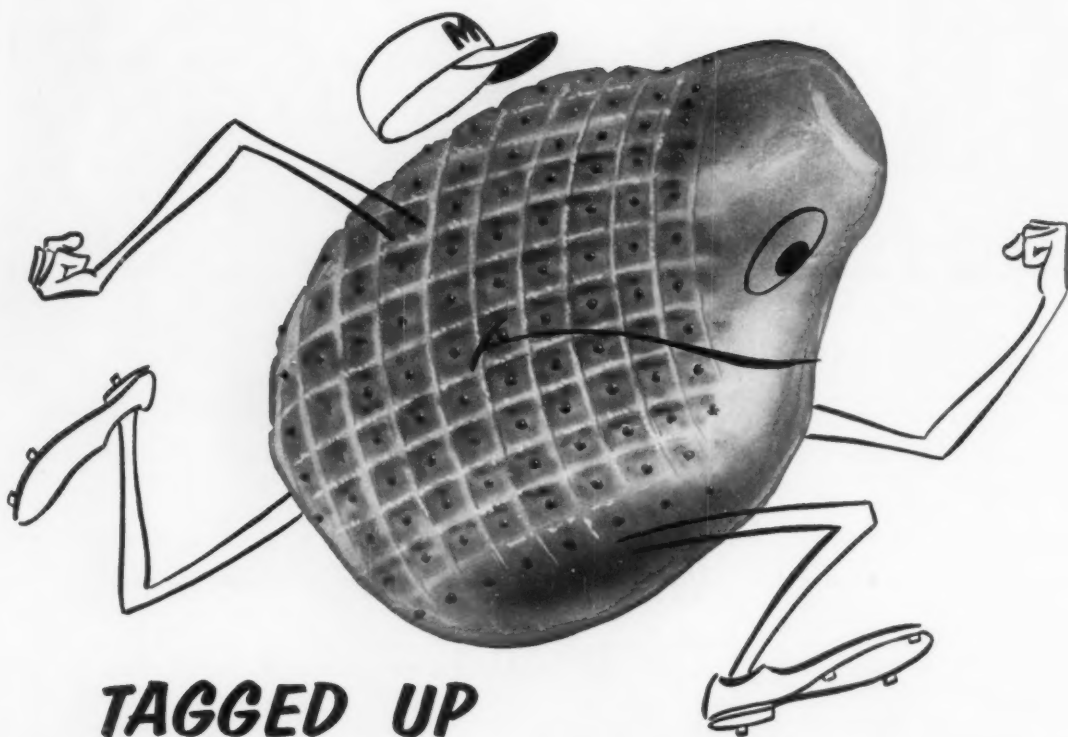
Cel-Fibe is always available from a dependable source, when and as you need it. For the name of your nearest distributor — write, wire, or phone:

# CEL-FIBE

Division of Personal Products Corp.  
Milltown, N. J. • Milltown 8-0700

Booth 1453 • April 4-7 • AMA Packaging Show • Atlantic City





## TAGGED UP ...AND HEADED FOR HOME PLATE!

INFORMATIVE  
to whet appetite!

Morrell and Dennison teamwork  
scores with this hard-hitting,  
double-duty tag!



PROMOTIONAL  
to win action!

**An idea on a tag is often your last chance to clinch a sale!** This is especially true in the self-service grocery field. Morrell's successful "premium offer" on the back of their informative tags is typical of the hundreds of sales-clinching devices in Dennison's idea file. And, fortunately for you, tags plus ideas cost no more than tags alone.

**Add extra value to your next tags . . .** idea-wise, design-wise, quality-wise, cost-wise . . . by adding Dennison to your merchandising team. We can help you tailor your tags to any informative or promotional task . . . as we have done for America's top merchandisers. Creative sug-

gestions and cost quotations are yours for the asking. Let's get together soon.

**P. S. Other extra Dennison values include:** equipment for imprinting variable information; the broadest range of tag-fastening devices; family-designed labels for any surface.

# Dennison

Helping you compete more effectively

FRAMINGHAM, MASSACHUSETTS

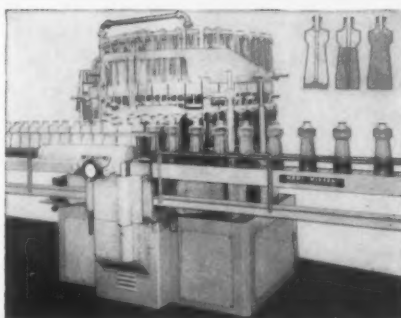
Offices in Principal Cities



## Kiefer VACUUM FILLER with stems submerging

Functions with stems SUBMERGED from START to FINISH of fill and at greatly enhanced speeds.

On very foamy products you will find hardly a bubble! Filling height quickly ADJUSTABLE while machine is in MOTION.

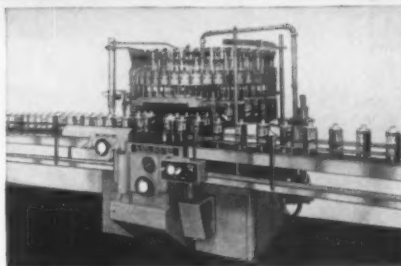


## Kiefer PRESSURE- VACUUM FILLER

Has the distinctive, almost unbelievable, feature of filling any container WITHOUT use of a SEAL.

An automatic cut-off operates at pre-determined liquid level, giving "PIN POINT" accuracy. Speed unlimited!

for POLYETHYLENES . . BOTTLES . . JARS . . TINS.



Kiefer builds FILLING also CLEANING MACHINES in a range of sizes. Fully automatic—semi-automatic—for light & heavy liquids, & pastes.

## The Karl Kiefer Machine Co.

924 MARTIN PLACE CINCINNATI 2, OHIO  
NEW YORK • BOSTON • CHICAGO • SAN FRANCISCO • PHILADELPHIA • HOUSTON  
TORONTO • VANCOUVER • SAVANNAH • LOS ANGELES • LONDON, ENGLAND

Heldrich, H. C. Hayworth, L. Swec.  
Hotel: Dennis.

GRAPHIC SUPPLY CO., INC. Booth 1207. Exhibit of Tru-Tone rollers, manufactured by U. S. Rubber Co., for all type presses and printing methods. Personnel: B. Tankel, M. Glenz, C. T. Zeese. Hotel: Chalfonte-Haddon Hall.

GRAY CO., INC. Booth 1229. Display of pumping and measuring devices; fluid-transfer pumps; also filling devices. Personnel: J. R. Jewell, C. F. Murphy, D. Koch, W. E. Salovich. Hotel: Traymore.

GRAYMILLS CORP. Booth 1535. Exhibit of agitator pumping system; Viscard viscosity-control unit; also ink filters. Personnel: O. E. Marthinson, R. Hollis, R. L. McCollom.

GREIF BROS. COOPERAGE CORP. Booths 1248, 1254. Display of fibre, steel and plywood drums; Poly-Ply and C-Mor carboys; wood barrels and kegs; Ro-Con round-corner, convex-sided fibre drum; new Carpenter Lok-Rim "FF" fibre drums. Personnel: F. K. Duffy, F. T. Deahl. Hotel: Claridge.

GRIFFIN-RUTGERS, INC. Booth 1516. Mark I and Mark II Codedge label dating and coding machine on display. Hotel: Chalfonte-Haddon Hall.

GUMP, B. F., CO. Booth 635. Display of Bar-Nun Auto-Check can or jar

weighing and packing line; Bar-Nun Auto-Check net weigher; Edtbauer-Duplex automatic net weigher; Vibrox barrel packer; Bar-Nun automatic bag feeder, opener and weigher; Tempo-Vane automatic bag feeder and opener; Tempo-Vane automatic bag tucker; Tempo-Vane automatic bag sealer; also Bar-Nun rotary sifter. Personnel: D. B. Spence, E. J. Miller, L. J. Nowak, Jr., L. Jacobsen, A. E. Hawkins, J. E. Wilson. Hotel: Ambassador.

GUTMANN, FERDINAND, & CO. Booth 125. Screw caps and Filma-Seals on display. Hotel: Ritz Carlton.

HAMPTON MFG. CO., Industrial Tape Div. Booth 1149. Exhibit of Blue Cross pressure-sensitive paper and cloth tapes, including natural crepe and flatback all-purpose masking tapes; crepe and flatback packaging tapes in colors; printable paper tapes; paper tapes conforming to UUT-106A Type I and Type II Government specifications; economy-grade cloth tapes; waterproof cloth tapes; cloth packaging tapes in colors; JAN-P-127 and PPP-T-60 cloth tapes; extra-strength flatback plastic tapes in colors. Personnel: C. I. Lee, N. G. Dales, R. N. Balkind, J. G. Dales, W. E. Girard, J. Cohen.

HARRIS-SEYBOLD CO., Div. of Harris-Intertype Corp. Booth 1402. Color slides and photos of offset presses, metal decorator presses, "Saber" cutters, full-hydraulic mill trimmers. Per-

sonnel: R. T. Cookingham, R. H. Randall. Hotel: Shelburne.

HAYWOOD PUBLISHING CO. Booth 442. Exhibit of literature pertaining to three Haywood publications—*Consumer Packaging, Industrial Packaging and Boxboard Containers*; also daily show news distribution headquarters. Personnel: M. Haywood, Jr., M. O. Pottlitzer, L. B. Bergstrom, N. A. Olson, J. Dunham, J. A. Weber, D. Dean, D. F. McCammon, J. J. Halloran. Hotel: Shelburne.

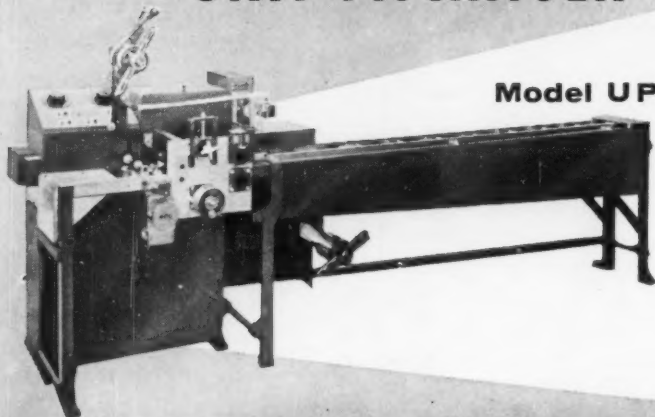
HEDWIN CORP. Booth 159. Exhibit of latest models of Cubitainers with fibreboard overwraps or wirebound wooden overwraps; drum liners of both film and molded-plastic construction; typical Cubitainer in-plant handling situations. Personnel: B. N. Harris, Jr., E. W. Smith, III, C. A. Speas, E. B. Edwards, A. M. Taliaferro, R. M. Coulbourn, III. Hotel: Colony Motel.

HEEKIN CAN CO. Booth 931. Exhibit of lithographing on metal; beer cans; lard cans; pour-spout bowl and drain cleaner containers; cake and candy boxes; picnic coolers; wastebaskets. Personnel: R. L. Sayre, C. A. Rolfes, B. O. Hering, R. L. Gastenveld, G. E. Tierney. Hotel: Claridge.

HEINRICH EQUIPMENT CORP. Booths 213, 217. Operation of high-speed Poly-Matador polyethylene bag-making machine; also a 2½-in. Reifen-



# *wrap-ade* HIGH SPEED UNIT PACKAGER



**Model UPC-CONVEYOR FEED**

Ideal for packaging small textile products, flat food items, paper goods, toys, premiums, bandages, or any other flat product under 1" thick.



Typical  
Fin Seal  
Package

## ONE OF MANY



SINCE 1932

Send us a sample of your product today for our prompt quotation.

**MACHINE CO., INC.**

187 SARGEANT AVENUE

CLIFTON, NEW JERSEY

PHONE: PRESCOTT 3-6150

Wrap-Ade Unit  
Packagers are  
available for  
packaging:

- Liquids
- Powders
- Tablets
- Soft Goods
- Food Products
- Hardware

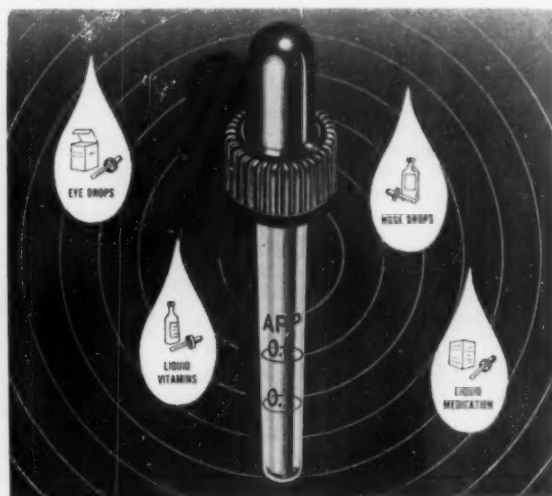


## *Fast-Faster-Fast*

CONTINUOUS & INTERMITTENT MOTION  
INCREASED PRODUCTION SPEEDS  
THREE TYPES OF PACKAGING MACHINES  
OBJECTS—FREE FLOWING—SOFT GOODS  
ELEC. EYE—VACUUM—TEMP. CONTROLS  
PRINTING—COUNTING—POUCH TYPE PACKAGE  
FULLY & SEMI AUTOMATIC

**PAK-RAPID, INC.** 1945

1802 ELIZABETH ST. TAYLOR 8-3511 WEST CONSHOHOCKEN, PA.  
PMMI SHOW 1961



a complete line of plastic and glass  
droppers and assemblies

Skilled craftsmanship, specialized machinery and prompt service have been hallmarks of Colonial Applicator Company for more than two decades. Services range from a creative art department for original designs; precise silk-screening and hot stamping, to the latest heat packs wrapped in Dupont K cellophane. Sample assemblies made immediately upon request. Representatives in major cities.

**COLONIAL APPLICATOR CO.**  
VINELAND, NEW JERSEY



hauser extruder with flat film die and chill-roll take-off system; illuminated photographs showing flexographic printing presses, bag machines, tail-end printers and other film and paper converting equipment. *Personnel:* K. R. Sunderlauf, H. P. John, R. H. Winkler, M. Schaule, P. Martin. *Hotel:* Traymore.

**HOBBS MFG. CO.** *Booth 613.* Demonstration of flexible D.C.-powered Vers-A-Wind tension-control drives; other fine winding and tension-control drives, including A.P.F. winder and the Hobbs-Alquist winder; standard winding stands. *Personnel:* H. K. Lambert, G. B. Clay, L. R. Damour, R. C. Wilson, R. P. Simoncini, S. F. Oakes.

**HOLLANDER, ALLEN, CO., INC.** *Booths 614, 616.* Exhibit of new two-way pressure-sensitive label dispenser to handle both rolls and fanfold labels in single and multiple widths; many new ideas in labelation-automation; Able-Stik pressure-sensitive, heat-seal, water-activated gummed and ungummed labels, with and without marginal or control punch feed holes, to be used with any type of automatic or semi-automatic equipment; also new Name-Stik, Decor-Stik and Window-Stik; free copies of "Ideas in Action" available. *Personnel:* S. A. Hollander, A. D. Berliss, Jr., M. F. Antoville, A. Berman, C. Manson, H. Siegel, H. Klatner. *Hotel:* Shelburne.

**HUDSON-SHARP PLANT, FMC Packaging Machinery Div., Food Machinery & Chemical Corp.** *Booths 520, 526, 530.* Exhibit of high-speed Poly Campbell Wrapper to handle a variety of single or multi-unit packages with or without stiffeners at speed up to 150 or more per minute and which can be field converted to run cellophane. *Personnel:* W. R. Huguenin, A. J. Olsen, R. E. Lansing, Jr. *Hotel:* Dennis.

**IDEAL STENCIL MACHINE CO.** *Booths 622, 624.* Display of Mark V Voliv-Mark automatic stenciler; Mark XX hot-press marking machine; stencil-cutting machine; electric Clip-A-Tape tape-dispensing machine; A2 Clip-A-Tape hand-operated automatic tape machine; marking equipment for inks and roll-on applications. *Personnel:* R. Williams, R. Joyce. *Hotel:* Ambassador.

**IDEAL TAPE, INC.** *Booth 1002.* Glas-Tred strapping tapes, cloth bundling tapes, paper-holding tapes and colored produce-packaging tapes. *Personnel:* H. Garfield, B. Garfield, E. Stevens, C. Bucario. *Hotel:* Colony Motel.

**IMPACT-O-GRAPH CORP.** *Booth 1324.* Exhibit of several different types of mechanical recording accelerometers used for field testing of merchandise and laboratory testing of packages; new Go-No-Go mechanical indicating accelerometer to show whether a damaging shock has taken place to a product in transportation. *Personnel:* W. S. Mielziner, J. B. Hickox, A. Colen, O. Lohkemper, E. LeMay. *Hotel:* Diplomat Motel.

**INTAGLIO SERVICE CORP.** *Booth 208.* Visual display featuring various steps and methods in gravure process of engraving copper cylinders and flat plates; multicolor printed samples on paper, board, cellophane, foil and plastics. *Personnel:* L. S. Pinover, O. S. Haverfield, S. Flannery, P. MacAvoy, V. Arcuri, J. Aldinger, N. McMichaels. *Hotel:* Shelburne.

**INTERCHEMICAL CORP., Printing Ink Div.** *Booth 329.* Display of variety of types, sizes and shapes in packages, including prize winners and hard-to-print surfaces; "Show within a Show" featuring cartons printed with new Speed King carton inks for letterpress and offset; new Speed King gravure inks; flexographic printing on plastic films with new Wonderflex and Flexotuf inks; a variety of booklets and folders on printing inks, including "Color for Package Printing" will be available. *Personnel:* W. F. Cornell, C. S. Johnson, V. J. Porth, Jr., J. T. Hargrave, D. E. Tuttle, R. H. Griffith, E. A. Green, F. W. Cray, O. C. Holland, S. P. B. Kimmins, H. Gaetjens, W. S. Law, F. A. Dick, J. F. Steinbruner, W. S. Ruxton, A. Reitz, R. Stocker, L. H. Fish, F. Whistler, A. W. Legge, G. Pharr, L. Zande, J. Power, Jr., E. B. Perry, J. S. Clark, E. H. Davis. *Hotel:* Claridge.

**INTERNATIONAL EASTERN CO.** *Booth 1329.* Exhibit of new high-speed conveyor-type printing machine for cylindrical pieces; range of letterpress printing machines for curved and flat items. *Personnel:* H. Berez, L. Galvin, B. Berez, M. A. Gilbert. *Hotel:* Colony.

**INTERNATIONAL PAPER CO.** *Booths 1239, 1241, 1245, 1247, 1249, 1253, 1338, 1342, 1346, 1348, 1354.* Island display featuring moving platform for a tour of company's manufacturing and converting processes from forest to finished package; samples of finished packages for products ranging from small cosmetic boxes to major appliances, such as refrigerators, freezers, etc. *Personnel:* R. R. Worthington, W. L. Shoemaker, W. S. Snyder, W. D. Hurlbut, C. S. Edgar, T. J. May, P. C. Strine, L. E. Graham, L. T. Krumm, Jr., C. Pritchett, D. Wilkins, B. Sickel, G. M. Oleson, A. R. Wylie. *Hotel:* Chalfonte-Haddon Hall.

**INTERNATIONAL STAPLE & MACHINE CO.** *Booth 429.* Exhibit of stapling products; Fas'Nail products; wire specialty products; vacuum lifting products. *Personnel:* C. S. McKee, G. P. Heilman, P. Crawford, H. E. Daily, V. Zike, J. Romney, P. Capps, J. Holbach, W. L. Jackley, J. Horn.

**JACKMEYER CORP.** *Booths 1522, 1524.* Exhibit of new Magi-Stik blister pack—a pressure-sensitive blister that can be applied to a merchandising card without special equipment; all types of pressure-sensitive labels, color labels, hang tags, catalogs and brochures. *Personnel:* L. Hershaff, A. Her-

## PACKAGE TISSUES FASTER



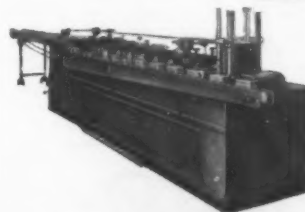
## WITH CECO MODEL 40 AUTOMATIC CARTONER

- Handles 200 to 500 count cartons at speeds up to 90 per minute.
- Changeover from one size to another takes only twenty minutes.

Here at relatively low cost is the perfect combination of speed and flexibility. With the product inserted manually, the Ceco Model 40 handles a glue seal end carton fully automatically from hopping through sealing.

The Model 40 can also be had to handle heavy weight board or corrugated as well as tuck style, lock style or, a carton having one glue end and one tuck end. It is ideal for bagged products, bakery products, frozen foods, drug products, hardware, etc. For full details write for a 40 Brochure.

**CECO**



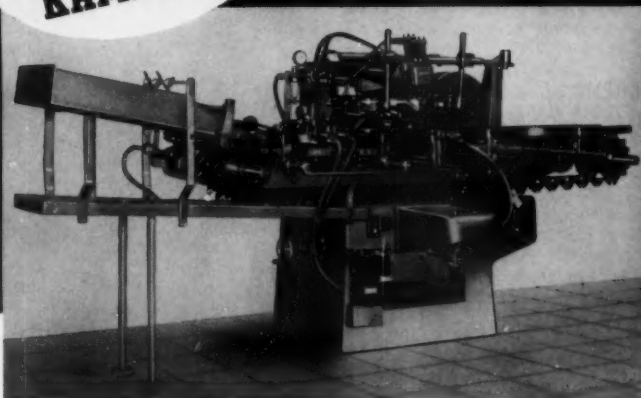
## CONTAINER EQUIPMENT CORPORATION

78-88 LOCUST AVENUE, BLOOMFIELD, N. J.



**WERNER  
KAMMANN**

*High Speed*  
SCREEN PRINTING MACHINES



(ILLUSTRATED MODEL K-5B)

For Volume Printing Of:

**BOTTLES • VIALS • AMPOULES AND OTHER CONTAINERS**

**Cylindrical • Conical • Oval • Flat Surfaces**

- Precision made in Germany
- Automatic feed
- Printing speeds up to 6,000 per hour
- Automatic takeoff
- Models for every production requirement

**WRITE FOR INFORMATION AND SPECIFY YOUR PRODUCTION REQUIREMENTS**

See our Booth 1504 Atlantic City

## PAN INDUSTRIAL CORPORATION

38 West 21st St., New York 10, N. Y.  
CHelsea 2-7221 • Cable Address "DUSINPAN" New York

## BLISTER-PACK MOVES MERCHANDISE



— Bubbles and heat seal coated cards by Pan-o-ramic Package, Janesville, Wis. — Heat Seal equipment by Pan-o-ramic Machine Corp., Janesville, Wis.

Just as the container for the Kleen-steam water conditioner by Illinois Water Treatment, Rockford, Ill., illustrated here provides a truly visual, lustrous display, so can your products get the benefit of added "punch" at the point-of-purchase. For blister packs of MIDLON "B" have unexcelled beauty, clarity and exceptional strength, give your product new-buy appeal. Easily and inexpensively formed, MIDLON "B" may be

**BUILDS UP  
CUSTOMER IMPACT,  
SALES APPEAL**

*Adds the sparkle  
of packaging  
perfection to  
your product!*

stamped, cut, embossed, laminated, cemented, pressure or vacuum formed. It has rugged toughness, a broad range of colors, light weight and high impact strength.

For your needs in acetate, butyrate or polystyrene, be sure to say, "MIDLON, please!" by Midwest Plastic Products, the nation's oldest, largest exclusive extruder of thermoplastic sheet.



1801 CHICAGO ROAD  
CHICAGO HEIGHTS, ILLINOIS

shaft, M. Rauch. Hotel: Ritz Carlton.

**JANESVILLE COTTON MILLS.** Booth 1048. New line of packaging for heavier fragile equipment for industrial use; product packaging will be illustrated. Personnel: M. E. Mott, N. B. Pruce. Hotel: Dennis.

**JIFFY MFG. CO.** Booth 412. Panorama of protective packaging materials from standard macerated paper pads to new high-resilience Kushion Kraft insulated bags and liners; full line of shipping bags; also new shipping bag with tear-tape opening device; Golden Clupak paper and hot-melt bag seams. Personnel: C. F. Johnson, M. C. Weisenhorn, I. D. Farrington, M. J. Vallis, H. L. Simons, R. C. Garland, T. E. O'Shea, J. A. Mitchell, J. M. Austin. Hotel: Traymore.

**JOHNS-MANVILLE DUTCH BRAND DIV.** Booth 1105. Display of filament-reinforced and paper strapping tapes; full line of pressure-sensitive cloth and paper packaging tapes; rubber-based adhesives. Personnel: C. G. Geiger, D. J. McLinden, W. H. Hobelsberger. Hotel: Shelburne.

**KAHLENBERG GLOBE EQUIPMENT CO.** Booth 103. Demonstration of fully automatic ampoule filling and sealing machines; liquid-filling machines for filling small containers of 2 oz. or less; new Model 157-A automatic ampoule feeding, filling and sealing machine which fills and seals at speeds up to 60 per minute for the single model and up to 120 per minute on the double model. Personnel: J. F. Kahlenberg, Mrs. J. F. Kahlenberg. Hotel: Traymore.

**KARTRIDG PAK CO.** Booth 669. Complete line of aerosol filling equipment, including new rotary pressure filler and crimper; standard straight-line aerosol filling equipment; also laboratory equipment. Personnel: G. W. Heath, G. Hoyt, C. LeBeau, J. Jecker, G. McAteer. Hotel: Shelburne.

**KEYES FIBRE CO.** Booth 1321. Molded-pulp packaging for fragile articles to be featured. Personnel: D. H. Smith, N. J. Gian, R. A. Lessard, E. C. Phillips. Hotel: Claridge.

**KIMBERLY-CLARK CORP.** Booth 351. Kimpak Super Crepe interior packaging and Kimpak compressed interior packaging to be featured. Personnel: W. B. Meyer, D. L. Merritt, J. M. Dupier, J. A. Adams, C. J. Darcy, W. T. Dorzweiler, W. A. Hemming, A. Hertz, R. G. Rydbom, E. C. Burch, E. C. Evans, S. L. Swenson, J. Staley. Hotel: Chalfonte-Haddon Hall.

**KINGSBURY & DAVIS PLANT, FMC Packaging Machinery Div., Food Machinery & Chemical Corp.** Booths 520, 526, 530. Exhibit of new transparent-lid machine on which both acetate and styrene lids are formed and sealed at 1,500 to 1,800 per hour on short or [Continued on page 354]



## NOW—FILL ANY LIQUID WITH THE NEW

*Filamatic*

### LIQUID FILLER

*Fills Free-Flowing,  
Viscous and  
Foaming Liquids!*



- Completely portable—ready to use on any bench top
- 1, 2, or 4 nozzles—speeds up to 120 per minute
- Fills plastic, glass or metal containers
- Wide filling range—one drop to 16 ounces
- Electronic, variable speed drive
- Adjustable suck-back
- 1% filling accuracy

Solve your filling problems with the new Filamatic—the **only** portable, volumetric filler that handles all liquids. Provides drip-free filling of water-thin products, heavy oils, viscous adhesives or foaming lotions. Fills polyethylene bottles, glass or metal containers. Single drop to 16 oz. capacity increases to 2½ gallons with Multi-Stroke Attachment. Write today for new 12 page brochure. . . . See us in Atlantic City at the N.P.E. Show, Booth 1318

#### NATIONAL INSTRUMENT CO.

4121 Fordleigh Road

Baltimore 15, Maryland

## SOLVE YOUR PACKING PROBLEMS at Low Cost with

**PARTITIONS**  
• Sleeves • Necks •  
FOR PROTECTIVE  
PACKAGING



WRITE, PHONE, WIRE for QUOTATIONS on YOUR REQUIREMENTS

Peter Partition Corp. operates one of America's largest plants devoted exclusively to the production of cardboard partitions.

### PETER PARTITION CORP.

Manufacturers of Cardboard Partitions

124 BOERUM PLACE

BROOKLYN 1, N.Y.

Telephone: TRIangle 5-4033

In Plastic Packaging

## GET ALL THE SAVINGS . . .

### . . . YOUR HIGH-VOLUME PACKAGING REQUIREMENTS DESERVE

The new Kent Plastics plant was designed and built by an experienced organization to meet a growing demand. It is engineered and equipped specifically to save money on high-volume, continuous thermoforming of packages for all industries. Contact Kent Plastics now—for assistance in creating new package designs—or to meet the most exacting specifications of your own design.



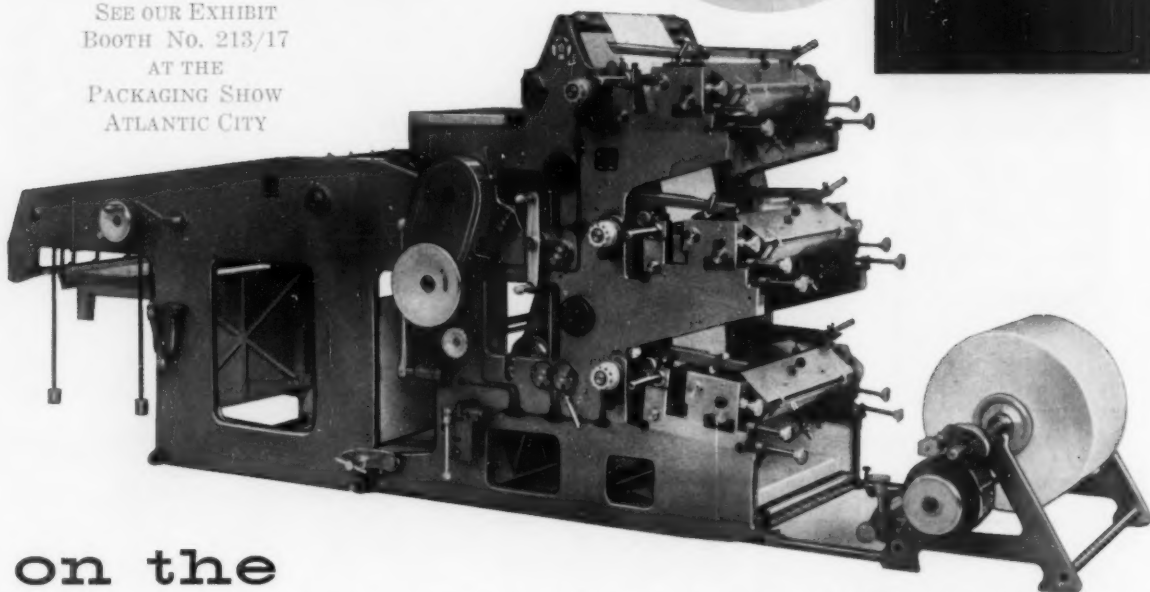
**KENT PLASTICS**  
CORPORATION

1528 N. Fulton Avenue • Evansville, Indiana



# start out with **ROLL** stock end up with multi-color printed sheets

SEE OUR EXHIBIT  
BOOTH No. 213/17  
AT THE  
PACKAGING SHOW  
ATLANTIC CITY



## on the **HEINRICH FLEXO-REX** FLEXOGRAPHIC PRINTER WITH SHEETER AND PILE DELIVERY

Utilize mill-roll stock . . . less costly than sheeted material and easier to handle.

Printing up to three colors in one run through the press.

Sheets . . . delivered jogged in a perfectly straight pile permitting immediate straight-knife cutting or other secondary operations.

Entire printing and sheeting operation handled by one operator.

Variable range of sheet-length . . . (cut-off length) from 9" to 25½" assures utmost flexibility. Keeps inventory on sheeted material down.

### NEXT TO AUTOMATION

in-line production is a sure way to increase productivity. The economics of in-line printing and converting are obvious and well established, particularly if the basic investment is a modest one.

In printing mail wrappers, bandwrappers, box covers, place mats, special wrapping papers, advertising items, etc. in one to three colors, the FLEXO-REX represents an ideal production set-up. It converts any type paper from roll stock to printed sheets in one continuous operation, stacks and jogs the sheets automatically, at up to 150 printed sheets per minute.

Check your printing; then mail us samples of work that fit our 25½" or 34" wide flexographic printer-sheeter. We will promptly give you our recommendations as to how these jobs can be handled on our FLEXO-REX with **MORE PROFITS TO YOU.**

## HEINRICH EQUIPMENT CORP.

111 EIGHTH AVENUE • NEW YORK 11, NEW YORK  
FLEXOGRAPHIC PRINTING PRESSES, BAG MACHINES, EXTRUDERS FOR PLASTIC FILM



- ① SELECT the items you want
- ② CIRCLE the corresponding numbers on the post card
- ③ FILL IN the information requested
- ④ MAIL — no postage required

## HELPFUL LITERATURE

# FREE

There is valuable data — worth dollars and cents to you — in the literature and samples described below.

### EQUIPMENT • SUPPLIES • SERVICES

**POLYETHYLENE FILM.** 14-page catalog contains specifications, order information, yield charts and formulas on available general, application engineered, high impact and specialty polyethylene films. Chippewa Plastics Co., Div. of Rexall Drug and Chem. Co. (C-050)

**CLOTH LINED PAPERS.** Folder contains white and colored samples of cloth lined papers for use as tags, labels, envelopes, bags for small parts, special containers, displays, etc. Wyomissing Paper Products, Div. of Narrow Fabric Co. (C-051)

**AUTOMATIC PE PACKAGER.** 8-page illustrated brochure describes line of automatic machines that package rigid, non-rigid (and combination of both) products in tight-to-product, edge-sealed polyethylene wraps at rates from 10 to over 100 per minute. Amsco Packaging Machinery, Inc. (C-052)

**SLITTER AND REWINDER.** Illustrated data sheet describes a model adaptable for slitting and rewinding paper, tape, all plastic films, foils and laminates at web speeds to 1,500 feet per minute. Machine said to handle light films and heavy paper with equal facility. John Dusenbery Co., Inc. (C-053)

**PLASTIC CONTAINER-MAKING MACHINE.** 10-page illustrated brochure describes machine that produces up to 8,000 plastic containers per hour from roll stock. For liquids, creams, pourable materials. Sizes up to 1 qt., variety of shapes. Can be tied in with continuous filling and sealing operations. Is leased. Leedpak Inc. (C-054)

**CASE PACKERS.** 4-page illustrated brochure describes a line of continuous-motion case packers that pack bottles, cans, jars up to 32 oz. in standard return cases, shipping cartons at speeds up to 30 cases per minute. George J. Meyer Mfg. Co. (C-055)

**BLOW MOLDING MACHINES.** 4-page illustrated brochure describes line of machines that mold parts to 14 in. in diameter and 36 in. in length at dry cycle rates up to 14,000 parts per hour. Auto-Blow Corp. (C-056)

**HEAT SEALING MACHINERY.** 12-page illustrated booklet describes hand, foot pedal, and power operated pneumatic and electromagnetic heat sealers for welding thermoplastic films. Vertrod Corp. (C-057)

**SEMI-AUTOMATIC POLY PACKAGERS.** Illustrated 4-page folder describes semi-automatic polyethylene packagers that wrap and seal soft goods, hardware, stationery, phono records, etc. Accommodates packages up to 19 in. by 24 inches. Sealaround Corp. (C-058)

**BABY AND JUVENILE PAPERS.** Sample book contains wrapping papers for baby and juvenile products. Stocked in 26 in. and 30 in. rolls. Nashua Corp. (C-059)

**SUPERBONDED CELLULOSE MATERIAL.** 8-page technical bulletin describes a line of non-woven materials said to combine the workability of cloth with the disposability and low-cost of paper. Can be converted, dyed, printed, coated, etc. Kimberly-Clark Corp. (C-060)

**BIN VIBRATORS.** 12-page illustrated catalog describes 14 electric vibrators for keeping stubborn bulk materials and parts free flowing from bins, hoppers and chutes. Syntro Co. (C-061)

**PADDED SHIPPING BAGS.** Series of 3 illustrated case histories show features of this company's padded shipping bags as used for packaging electrical instruments, books and do-it-yourself kits. Jiffy Mfg. Co. (C-062)

**AUTOMATIC CASE SEALER-TAPERS.** Illustrated data sheets describe line of custom built self-contained machines for taping flaps for vermin and pilfer proofing, dust sealing, etc. Capacities up to 25 cases per minute. General Corrugated Machinery Co. (C-063)

**CODING, MARKING, IMPRINTING MACHINES.** 4-page illustrated brochure describes automatic production-line coding, marking and imprinting machines for packages, parts and products. Also describes imprinting attachments for wrapping, and bag-making machines. Gottscho. (C-064)

**SKIN PACKAGING FILM.** 5-page technical bulletin discusses advantages of using "poly-on Mylar vacuumized" for skin packaging. Takes up price factor, combining films and paperboards, utilization of existing equipment. Print-A-Tube Co. (C-065)

**CARTONERS.** Illustrated folder describes line of single and double end gluers for paperboard cartons. Produce up to 1,000 cartons per hour with one operator. Alford Package Machines, Inc. (C-066)

**ELECTRONIC UNWIND UNIT.** Illustrated data sheet describes unwind unit that automatically feeds paper into loop and automatically adjusts to speed of press, length of feed or type of stock by use of light-sensitive photo cells and an eddy current clutch. New Era Mfg. Co. (C-067)

**RUBBER PLATE MOUNTER-PROOFER.** 6-page illustrated brochure describes a line of units designed for quick in-register plate-mounting and proofing off the press. Machines handle plate cylinders up to 72 in. wide and 12 in. in diameter. Mostype Materials, Inc. (C-068)

**STATIC ELIMINATOR BARS.** 4-page brochure describes features of metal encased, one-point, induction, and shockless static bars for the elimination of charges on surfaces of paper, plastics, etc. Applications illustrated. The Simco Co. (C-069)

**SET-UP BOX LIDDER.** Illustrated data sheet describes automatic set-up box lidder for lidding or closing filled or empty boxes at speeds from 30 to 300 boxes per minute. Handles boxes from 1 1/4 by 1 1/4 by 1/4 in. to 22 by 14 by 4 1/4 in. Charles Beck Machine Corp. (C-070)

**GENTLE ACTION ELEVATOR.** Illustrated catalog sheet describes elevator for moving, elevating, lowering fragile foods and materials without breakage, dusting or marring. Permits fast, continuous bulk loading into trays without spillage. Econ-O-Veyor Corp. (C-071)

Fill out and mail this card now

### MODERN PACKAGING

#### MANUFACTURERS' LITERATURE SERVICE

Please send me the free items circled below. ☐ I am a non-subscriber\*  
I am ☐ a subscriber

C-050 C-051 C-052 C-053 C-054 C-055 C-056 C-057 C-058 C-059 C-060  
C-061 C-062 C-063 C-064 C-065 C-066 C-067 C-068 C-069 C-070 C-071  
C-072 C-073 C-074 C-075 C-076 C-077 C-078 C-079 C-080 C-081 C-082  
C-083 C-084 C-085 C-086 C-087 C-088 C-089 C-090 C-091 C-092 C-093

\*If you do not have a personal subscription and would like to receive the next twelve monthly issues plus the next annual Encyclopedia Issue (U.S.A. & Canada, \$7.00; all others, \$25.00) please check below.

☐ Check enclosed ☐ Send bill

NAME ..... POSITION .....  
(Please Print Plainly)

COMPANY .....

STREET ..... CITY ..... STATE .....

(This card cannot be honored after June 1, 1960)



# FREE **HELPFUL LITERATURE**

There is valuable data—worth dollars and cents to you—in the literature and samples described below.

- ① **SELECT** the items you want
- ② **CIRCLE** the corresponding numbers on the post card
- ③ **FILL IN** the information requested
- ④ **MAIL**—no postage required

## **EQUIPMENT • SUPPLIES • SERVICES**

**HINGE & CATCH ATTACHER.** Illustrated booklet describes motor-driven machine for attaching clinch hinges and catches to boxes. Equipped with automatic feed. Geissel Mfg. Co. (C-072)

**GIFT BOXES.** 24-page illustrated catalog lists prices for lines of nested, jewelry, silverware boxes; folding style boxes for women's and men's wear, etc. Pictorial Paper Package Corp. (C-073)

**CONTAINER LINER PAPERS.** Technical bulletin describes line of papers for use as container liner, pressure sensitive adhesive liner, film casting paper, plastic laminating separating, etc. Can be printed flexographic and gravure, single and multi-color. Riegel Paper Corp. (C-074)

**CONTAINER CONVEYORS.** 6-page brochure describes line of variable and fixed speed conveyors for standard bottles, jars, cans, etc. Island Equipment Corp. (C-075)

**MEN'S PAPERS.** Sample book contains 21 manly prints designed for set-up box and gift wrapping. For Father's Day, birthdays, etc. Lachman-Novasel-Owens Corp. (C-076)

**BLISTER EDGE FOLDER.** 8-page illustrated brochure describes a machine for folding edges of transparent blister packages to accommodate a slide-in card. Machine enables average operator to produce 600 to 800 folds per hour. Taber Instrument Corp. (C-077)

**AIR POWER STAPLER.** 4-page illustrated brochure describes a line of air-power staplers for high-speed, recoilless stapling in production line use. Machines feature air return, high speed piston and instant valve action. Paslode Co. (C-078)

**PACKAGE OPENING DEVICES.** 16-page illustrated booklet describes this company's tear tapes, non-woven thread as easy opening devices in film, paper and foil packages. Booklet also describes an opening device consisting of an automatically punched series of perforations in the film. The Dobeckman Co. (C-079)

**UNWIND, REWIND STANDS.** Series of illustrated technical data sheets describe this company's lines of unwind stands for feeding roll stock to embossers, slitters, printers, etc. Unwind stands operate at speeds to 2,000 feet per min.; rewind stands at speeds to 3,500 feet per min. Dietz Machine Works. (C-080)

**AUTOMATIC LABELER.** 4-page illustrated brochure describes a continuous-motion, automatic machine that applies labels from postage stamp size to 6 in. by 7 in. at rates up to 150 containers per minute. MRM Co., Inc. (C-081)

**TURNING OPERATION MACHINE.** Illustrated data sheet describes automatic air- and electrically-operated machine for turning, drilling and boring operations. Sheet offers company's services in designing, building packaging machinery. Ketchel Engineering Co., Inc. (C-082)

**BACTERIA-FUNGUS PREVENTATIVES.** 1-page folder describes a series of bacteriostatic and fungistatic agents to render products permanently germ-proof and mold-proof. Bex Industries. (C-083)

**AIRFLOW VALVE BAG PACKER.** Illustrated one page brochure describes bag packer which utilizes fluidizing principle in conjunction with other features of modern packer techniques. Data. Black Products. (C-084)

**CENTER WINDING, SLITTER REWINDER.** 4-page illustrated folder contains technical data and describes machinery for slitting and rewinding plastic films, foils papers, laminates and other materials at speeds up to 500 f.p.m. Cameron Machine. (C-085)

**ULTRAVIOLET RADIATION NULLIFIER.** 2-page technical data brochure describes application of stabilizing chemical used to prevent deterioration in cosmetics, plastics, paper, and wood by ultraviolet radiation. Antara Chemicals, Div. of General Aniline & Film Corp. (C-086)

**PLASTIC CYLINDER FABRICATOR, READER.** 8-page illustrated brochure describes features of units designed to introduce speed and uniformity into production of cylindrical and oval bodies made from clear transparent sheeting, and convert strips of plastic into beaded cylinders with a single operation. Technical data, specifications. Plastic Machine Div., Taber Instrument Corp. (C-087)

**USE OF COLOR ON SHIPPING CARTONS.** 20-page illustrated color folder tells graphic story of various situations, when and how to choose color for corrugated containers, dealing with special problems. Stone Container Corp. (C-088)

**SCREW CAPPING EQUIPMENT.** 6-page illustrated brochure describes features of machines designed for positive, pneumatic application of metal closures of varying dimensions. Technical data and specifications. Pneumatic Scale Corporation. (C-089)

**INDUSTRIAL STARCHES, DEXTRINES, CHEMICALS.** 8-page illustrated booklet describes line of starches, dextrines, processed gums, adhesives and other specialty chemicals for application in paper, converting, textile, packaging, baking, food processing and pharmaceutical fields. Morningstar-Paisley, Inc. (C-090)

**MATERIALS HANDLING UNIT.** 2 pages of descriptive matter and accompanying photo tells about features of new materials-handling dunnage product to improve handling efficiency of such things as tote boxes, pans, and boxes. Spaulding Fibre Co., Div. of Barber & Drullman, Inc. (C-091)

**PACKAGING TRIMMERS, SEALERS AND LINERS.** 7 illustrated data sheets describe line of equipment, in hand models and floor models, designed for cutting, trimming, liner-making and sealing, in the use of polyethylene, nylon and thermo-plastic films. Specifications, data. Packaging Laboratories & Designing, Ltd. (C-092)

**SINGLE SOURCE FOR BLISTER PACKAGING.** 6-page brochure describes features of multiple service offered under one roof, from creative layout and design, through fabricating, processing and printing, to produce blister, printed heat seal, seal fast cards, contract packaging, or the complete package. Western Printing Co. (C-093)

Fill out and mail this card now



**BUSINESS REPLY CARD**

First Class Permit No. 2656 (Sec. 34.9, P. L. & R.), New York, N. Y.

**MODERN PACKAGING**

**Village Station Box No. 103**

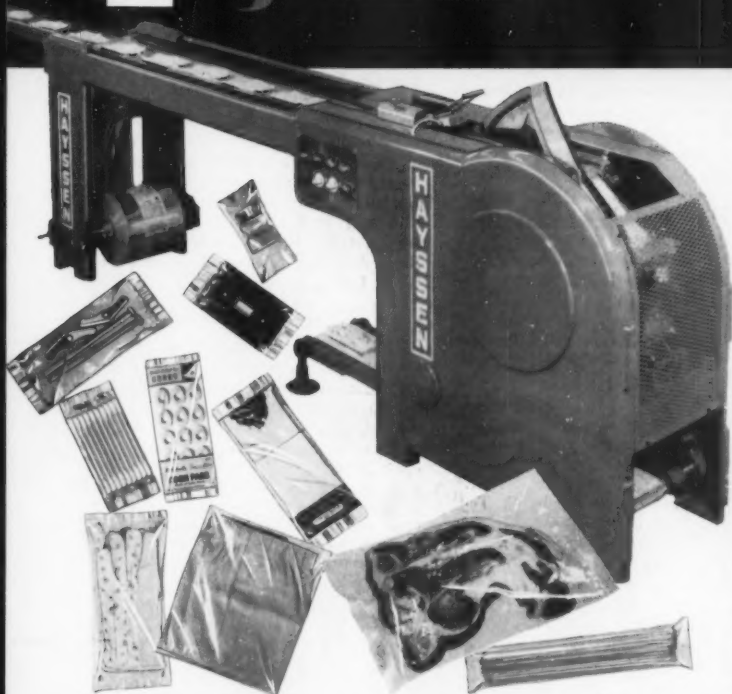
**New York 14, N. Y.**



**new HAYSSEN**

**RT**

**THE WORLD'S  
MOST VERSATILE  
PACKAGING  
MACHINE**



***Automatically packages products  
that other machines can't handle.***

The Hayssen RT machine makes a specialty of packaging products usually "wrapped-by-hand". Knitwear, clothing, meat, spaghetti, hardware, even cotton swabs can be wrapped at high speed without support cards or pre-cartoning. Each package is formed independently, the product is never touched by machine parts. A simple screw adjustment raises and lowers package height; length is adjusted by an electric eye or mechanical timer. The RT forms packages with polyethylene and all other heat sealing material at speeds from 20 to 150 packages per minute. See the RT demonstrated with your product. Write or call today.

**HAYSEN**

MANUFACTURING CO. Dept. MP 105, SHEBOYGAN, WIS.

*Offices in principal cities. Check your phone directory.*

Atlanta • Boston • Chicago • Dallas • Denver • Detroit • Jackson, Miss. • Kansas City • Los Angeles  
Minneapolis • New York • Philadelphia • St. Louis • San Francisco • Montreal • Toronto • Vancouver

**BOOTH  
410**

**SEE THE**

**RT**

**WORLD'S MOST FLEXIBLE  
PACKAGING MACHINE**

**THE NEW**

COMPAK  
SERIES

**J**

**ROTARY PACKAGING  
MACHINE**

**AMA**

**PACKAGING SHOW  
april 4th thru 7th  
ATLANTIC CITY, N.J.**



# WHERE DO YOU NEED plas-ties\*

## FOR TYING DRUM LINERS



## FOR TYING COILS OF WIRE TUBING, HOSE OR GASKETS



## AS CLOSURES FOR PLASTIC BAGS



### SEE HOW THEY'RE MADE

Vinyl plastic,  
laminated tight  
to wire.



Strong iron  
wire core.

Waterproof/Fadeproof  
Easily Applied/Reuseable

ASK FOR SAMPLES



**plas-ties  
company**  
SANTA ANA,  
CALIFORNIA

[Continued from page 348]

medium runs for either regular or beaded-top-edge lids in blank dimensions of from 4 by 3 in. up to 19 by 14 in. *Personnel:* P. D. Bell, W. F. Andresen, W. R. Huguenin. *Hotel:* Dennis.

**KLEEN-STIK PRODUCTS, INC.** *Booth 663.* Display of a new small, compact Model 100 label applicator for optimum performance with minimum adjustments for applying knife-cut as well as die-cut labels; full line of label stocks, including tamperproof labels in assorted colors, as well as silver and gold coloring; complete line of pressure-sensitive adhesive stocks for point-of-purchase advertising. *Personnel:* G. E. Cole, J. Zalkind, G. Collons. *Hotel:* Traymore.

**KOPPERS CO., INC.** *Booth 1104.* Display of packages made from Dylite expandable polystyrene, Super Dylan polyethylene, Dylan polyethylene, Dylene polyethylene and Durethane polyethylene film. *Personnel:* W. J. Fitzgerald, H. C. Lavelly, H. D. Cooper, G. H. Sollenberger, J. B. Schmitt. *Hotel:* Marlborough-Blenheim.

**KURHAN CO., INC.** *Booth 1318.* Small, fully automatic Schubert coder for coding of all types of containers on an existing line; also Filamatic positive-displacement-type fillers for accurate handling of materials from water-thin to heavy viscosities; newly designed Swan cap for vacuum and pressure capping of glass tumblers, together with capping equipment; Speede volumetric filler for dry and free-flowing materials. *Personnel:* M. K. Gunzenhauser, C. E. Schwab, C. Tevander, B. Swanson, S. Rosen.

**LABELLETTE CO.** *Booth 1215.* Exhibit of Models 11A, 11B, 12A, and 14. *Personnel:* J. G. Wesley, A. Meckenberg, S. Groudel, T. Hoshall, M. Tiemann, W. King, F. Allen, T. Lewis, M. Richards, W. Hett, L. Hollander, T. C. Fenton, W. S. Bryan. *Hotel:* Shelburne.

**LASSITER CORP.** *Booths 113, 115.* Extrusion-coated materials, plain and printed cellophane, Mylar, foil and papers of the company's Print-A-Tube Div. to be featured, as well as a skin-package machine and film used in the skin-packaging process; samples of packaging designed and manufactured for hosiery, textiles, food and other industries in flexible films, paper and paperboard. *Personnel:* J. H. Lassiter, L. W. Weller, J. V. Shea, E. N. Leonard, W. B. Wine, B. Lechner. *Hotel:* Claridge.

**LEEDPAK, INC.** *Booths 604, 606.* Display of new European packaging machinery, including new vacuum-forming and filling equipment; code imprinters and other devices; All-Pac plastic bottles and forms; Ultra Pak tetrahedron package; Empire Aluminium Co.'s Scottish foils. *Personnel:* C. M. Leeds, W. J. Gawghen, F. A. Connell, J. J. Duggan. *Hotel:* Shelburne.

**LEVER MFG. CO., INC.** *Booth 1044.* Completely automatic alitting machine for pressure-sensitive tapes and plastic film of all types on display. *Personnel:* C. Bogert, E. Johnson, R. Kagan, D. Gerstein.

**LILY-TULIP CUP CORP.** *Booths 919, 921.* Featured will be "Standout-ism," showing those elements of packaging that provide the merchandising appeal needed for today's increasing self-service and quality packaging. *Personnel:* J. Grady, E. Scully, D. Mahony, R. Hlavin, J. Falco, E. Sonderman, R. Panza, K. Mount.

**LONG & CO., INC.** *Booth 1238.* Exhibit of Atlantic Model 3 semi-automatic labeling machine for cylindrical containers; new Atlantic Model 4-A fully automatic labeler for applying both spot and wrap-around labels to bottles, cans, aerosols, jugs, etc., equipped with large label reservoir, glue pot and designed for easy cleaning; also new Model 4-A-W automatic labeler for application of all-over labels to paper tubes up to 36 in. in length and with a minimum diameter of 1 in. with escapement, pressure roll and automatic ejection of labeled tube. *Personnel:* M. A. Long, R. L. Arnold, G. Tyler, M. K. Itneyer, W. E. Kelley.

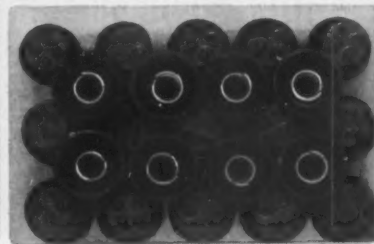
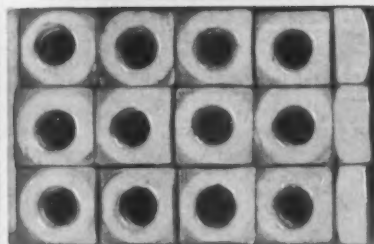
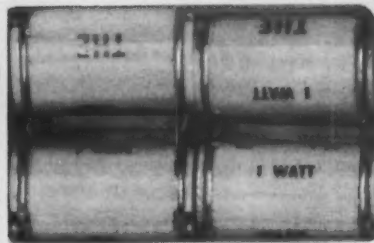
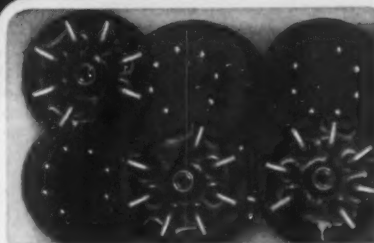
**MRM CO., INC.** *Booth 203.* Exhibit of Model CM continuous-motion labeler for integration in conveyor-type packaging line, with variable-speed drive to handle containers of fractional ounces through gallons at speeds from 40 to 150 per minute; Universal semi-automatic filler for thin to viscous liquids with speeds up to 75 containers per minute; Model "B" semi-automatic filler for short runs at speeds of 35-40 per minute. *Personnel:* H. D. Manas, Mrs. R. H. Manas, R. J. Dealy, R. Mishkin, R. Siegle, F. Rossetti, R. Manas, L. Orlick, P. Pallotta. *Hotel:* Shelburne.

**MANHATTAN ADHESIVES CORP.** *Booth 154.* Samples of adhesives for such difficult surfaces as acetate, cellophane, Mylar, polyethylene and most types of vinyls and plastics on display; also finished products made with company adhesives. *Personnel:* S. Eitelberg, S. Leoward, A. White, B. Roseman. *Hotel:* Traymore.

**MARKEM MACHINE CO.** *Booth 621.* Exhibit of industrial marking machines; Model U-1015A machine for automatic conveyor feed, print and take-away of flat-surface cosmetic cases and similar items; Model 70B6 in-line printing component for customer mounting on conveyor or in conjunction with special machines for flat surface marking; Cosomatic flat-bed letterpress; flexographic printer. *Personnel:* J. G. Powers, R. C. Mensel, S. M. Wright, J. H. Lyon, J. E. Kelen, H. B. Lampman. *Hotel:* Diplomat Motel.

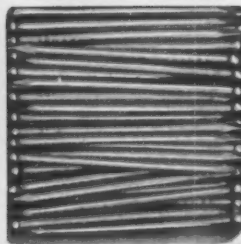
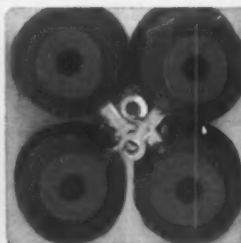
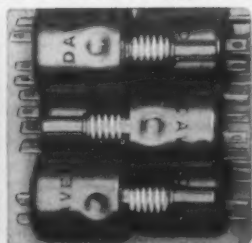
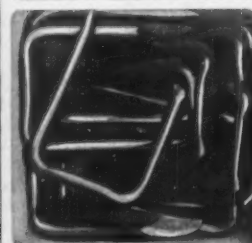
**MARSH STENCIL MACHINE CO.** *Booth 655.* Exhibit of new Stencilmation for automatic cutting of shipping





**This unbreakable plastic utility box is the lightweight, safe way to package and ship any mite-size product or family of products. It is reusable, too.**

**In 17 sizes and compartment variations plus wide range of colors. Transparent plastic utility boxes also available in 24 sizes and compartment variations.**



*For new catalog, samples and prices, write to*

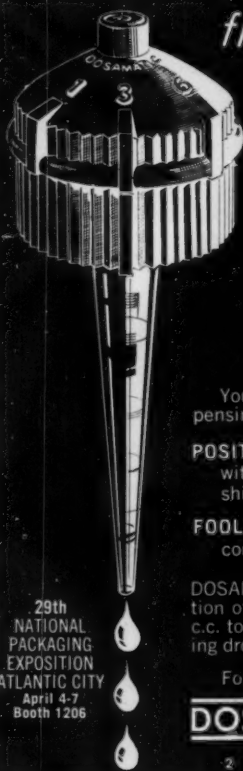


**Boright Avenue • Kenilworth  
New Jersey • BRidge 2-6400**

*Some sales territories still available to qualified representatives*

Canadian distributor: Twinpak, Ltd., 6525 Somerled Ave., Montréal, Québec, Canada • British affiliate: I.T.O.-I PLASTICS, Bridge Close, Romford, Essex, England





from this moment on...

## YOUR PRESENT DISPENSER CAP IS OBSOLETE

You are looking at the first real breakthrough in dispensing caps for liquid containers.

**POSITIVE PRIMARY SEAL.** Permits immediate capping with dispenser cap. Absolutely no feedback during shipment or storage. No separate cap needed.

**FOOL-PROOF DOSE MEASUREMENT.** Adjustable by consumer. Calibrated to your particular product needs.

DOSAMATIC DISPENSERS may be set for accurate ejection of any liquid ranging in volume from a fraction of a c.c. to teaspoonfuls. Size and cost competitive with existing droppers.

For additional information, write...

**DOSAMATIC** DROPPER CORP.

2 NORTH GROVE STREET, VALLEY STREAM, NEW YORK

29th  
NATIONAL  
PACKAGING  
EXPOSITION  
ATLANTIC CITY  
April 4-7  
Booth 1206

**SOLVED!**  
MORE production-LOWER cost..

## A-B-C SEMI-AUTOMATIC CASE PACKER



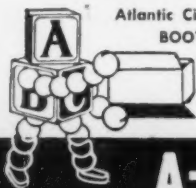
*Saves*  
**FLOOR SPACE**

This new "Job Rated" A-B-C Semi-Automatic Case Packer has been endorsed by the greatest names in the industrial field throughout the nation for its cost-cutting performance. This streamlined trouble-free packer requires the minimum amount of floor space and is furnished with either a center right or left hand discharge.

Step up your production to a higher profit level with this precision engineered packer that can be adjusted to various packing arrangements and case sizes.

SEE THIS MACHINE AT  
**NATIONAL PACKAGING  
EXPOSITION**

Atlantic City—Apr. 4-7  
BOOTH 550



WRITE TODAY FOR DETAILS — FLOOR PLANS and SPECS

**A-B-C** PACKAGING MACHINE CORP.  
TARPON SPRINGS, FLORIDA

stencils by means of a punched tape adaptable for various-sized stencil machines, including  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  and 1 in.; also standard line of stencil-cutting machines and supplies, electric tape machines, Felt-Tip markers and accessory items. *Personnel:* E. J. Marsh, E. G. Kruase. *Hotel:* Dennis.

**MARTIN ENGINEERING CO.** *Booth 1225.* Operation of large selection of rotary vibration inducers; air-, electric-, hydraulic- and gasoline-driven types for every vibrational requirement from a hopper of less than 1 cu. ft. to 400-ton bunkers that convey, feed, compact or sift materials of a powder or particle nature. *Personnel:* E. F. Peterson, E. H. Peterson, W. Dougherty, J. Haney, M. Peterson. *Hotel:* Claridge.

**MERCURY HEAT SEALING EQUIPMENT CO.** *Booth 370.* Display of new Strip-O-Matic; new label sealer; new scales on Verti-pak for hairline accuracy. *Personnel:* J. Dreeben, H. Cook, W. Greene, W. Scanlon, O. L. May.

**METAL EDGE INDUSTRIES.** *Booth 446.* Exhibit of metal-edge boxes — flats, stays, stayers, folding boxes; materials-handling and inventory control; new design developments; new products. *Personnel:* A. E. Wolf, J. A. Dolan, E. Williams, C. F. Banks, C. H. Black, L. E. Berry, J. W. Birch, J. E. Fleagle, P. M. McDade, W. A. Rice, E. W. Staudenmayer. *Hotel:* Claridge.

**METTLER INSTRUMENT CORP.** *Booth 1308.* Exhibit of new automatic balances for powdered or granular materials featuring automatic reject of overweight samples for highest tolerance control, capacities ranging from 1 gm. to 3 oz. with 0.2% accuracy; also automatic check-weighing balances for check weighing automatic reject, statistical tabulation or machine control. *Personnel:* H. P. Vaughan, E. G. Shull, D. L. Jones.

**MICHIGAN STATE UNIVERSITY,** School of Packaging. *Booth 1539.* Details of Packaging curriculum, information on graduate placement and availability of packaging graduates; progress made by Packaging Foundation featured. *Personnel:* J. W. Goff, H. J. Raphael, H. Lockhart, A. J. Panshin, R. Leonard, R. Face, E. Graft, R. Griffin, C. Merithew, K. Rahenkamp, M. Thompson, E. Campbell, S. Nada. *Hotel:* Ambassador.

**MILPRINT, INC.** *Booth 229.* Theme "Marketing Power"; display of award-winning packages; latest packaging developments in food and non-food fields; packaging exhibit of company's 22 foreign affiliates. *Hotel:* Claridge.

**MINNESOTA MINING & MFG. CO.** *Booths 212, 218, 222, 230.* Exhibit comprising five divisions — industrial "Scotch" tapes, "Scotchpak" polyester film, ribbons, "Scotchgard" chemicals products and Mid-States Gummed Paper Co. products; more than 300 different pressure-sensitive tapes for in-

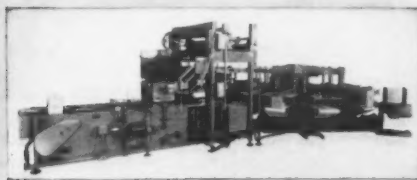


# What?

Feed all these different sized cases, in random order, into one automatic case sealing installation?

Yes! It's being done. The Omnimatic-Rotopress automatically seals and discharges corrugated shipping containers of widely varying dimensions, fed to it in random order, at speeds up to 20 cases per minute. A choice of pre-set discharge patterns permits the simultaneous use of as many as five different Rotopress discharge stations, with sealed cases of different heights automatically discharged to separate take-away conveyors. The G.E. installation shown below, employing a unique circular compression unit, occupies only 144.9 square feet, and permits random feeding of cases that may vary in length from 8" to 30", in width from 6" to 22", and in height from 6" to 18". This machine can be built to accommodate your particular range of case sizes.

*"Write for Omnimatic-Rotopress Brochure  
#100-60-MP"*



**Packomatic Omnimatic-Rotopress operating at the General Electric Company's Trumbull Lamp Plant at Warren, Ohio.**

WRITE for 8 page technical brochure giving complete design, application and dimension data. Request Packomatic Brochure 100-60.

# Packomatic

U.S. Reg. U. S. Pat. Off.

**J. L. Ferguson Company**

Box 1226 (Phone: SARatoga 5-2311)

Joliet 3, Illinois





PRINTING PLATE METHODS

# NEW!

## COSTS DROP

# 30%

And now a low durometer (20) plastic gum in uncured sheet form! Platemakers no longer need to use difficult-to-handle liquids to make plastic dies. No more need for air heating, no more worries about pouring.

Leading Fabricators estimate that because of molding defects with the pouring method, it costs about 30% more to produce plastic (liquid) dies.

Simply use conventional molds with U. S. Rubber's plastic gum in uncured sheet form. Plates made from this new but *tried* development have greater ink resistance than with liquid plastic or conventional low durometer Buna N compounds.

Williamson & Co., world's largest distributor of rubber and plastic platemaking materials to the printing trade, brings you this new *exclusive* product of U. S. Rubber. Order plastisol gum uncured sheets from any of Williamson's strategically located refrigerated plants.

Caldwell, N. J.      Atlanta, Ga.      Bryan, Ohio  
Grimsby, Ontario      San Mateo, Calif.  
or contact U. S. Rubber direct at Providence, R. I.

**WILLIAMSON & CO.**  
CALDWELL, NEW JERSEY

# versatility and automation

with **PACKER FILLING MACHINES**

Model PVA



... fully automatic  
liquid filling from  
OUNCES TO GALLONS!



Write for free catalog

**PACKER MACHINERY CORP.**  
109 14th Street • Bklyn 15, N. Y. • HY 9-8850

## CRISIS THE NEW FOOD & DRUG LAW CRISIS

### Will the new FOOD & DRUG LAW throw packaging into a turmoil?

The new Food & Drug Law Amendment requires that *any additive directly or indirectly* affecting the characteristic of *any food* must be approved by the Food and Drug Administration. This includes *packaging materials*. ■ What will this mean to food processors and packagers?...to packaging material manufacturers? ■ What extractability tests must be made to obtain F&DA approval? ■ What costs are involved *and who pays?* The answer to these and dozens of other vitally-important questions are contained in a complete interpretive report by the editors of MODERN PACKAGING. For your copy of this fact-filled 20-page report, send \$1.00 to MODERN PACKAGING, Room 400, 575 Madison Ave., New York 22, N. Y. (Bulk rates available upon request.)

**MODERN PACKAGING**  
575 Madison Avenue, New York 22, N. Y.  
A BRESKIN PUBLICATION  
Authority of the Field for Thirty-Two Years



dustry with many newly designed film packages; jumbo roll of filament tape weighing about 1,500 lbs. highlighted. *Personnel:* R. Mueller, E. Decker, L. M. Berlin, D. Joyce, V. H. Eyman, J. J. List. *Hotel:* Shelburne.

**MODERN PACKAGING.** *Booth 529.* Display of MODERN PACKAGING Magazine, the *Modern Packaging Encyclopedia Issue* and other Breskin Publication; editors and staff of magazine on hand for assistance and discussion. *Personnel:* C. A. Breskin, A. S. Cole, J. M. Connors, R. C. Beggs, P. H. Backstrom, S. Siegel, T. B. Breskin, B. R. Stanton, R. C. Nilson, P. W. Muller, M. Stoller, J. C. Galloway, W. F. Kennedy, T. O. McDonough, G. Krimsier, L. Stouffer, P. Hagens, T. Jones, R. Kelsey, W. C. Simms, G. Tarragano, R. MacBride, C. A. Southwick, Jr., S. L. Gerrish. *Hotel:* Shelburne.

**MONSANTO CHEMICAL CO.** *Booths 364, 927, 929.* Exhibit of complete line of plastics for packaging, including finished packages of Lustrex styrene, polyethylene, Vuepak cellulose acetate for drugs and cosmetics, food, soft goods, hard goods, industrial products; panel of packaging experts; electronic equipment to give solutions and answer questions on packaging automatically. *Personnel:* R. C. Evans, E. L. Hobson, E. K. Kennedy, P. Stahlberg, E. R. Tolles, E. S. Childs, E. H. Myers, L. A. Contini, T. S. Lawton, E. S. Brockney, E. D. Kennedy, G. C. Gross. *Hotel:* Chalfonte-Haddon Hall.

**MORNINGSTAR-PAISLEY, INC.** *Booth 541.* "Adhesives of All Types for Every Packaging Operation" will be the featured theme; enlarged, improved line of Solu-Rez low-viscosity, multipurpose polyvinyl acetate resin packaging adhesives of special interest for carton-sealing operations. *Personnel:* M. Stempel, E. C. Lenz, S. Schuller, D. Bookshester, P. M. Liner, H. R. Callahan, I. G. Nichol, A. Mayer, E. Bearman, H. Miller, M. Stempel, Jr. *Hotel:* Dennis.

**MOSSTYPE CORP.** *Booth 138.* Demonstration of new rubber plate mounter-proofer machine with movable inboard bearing, making machine suitable for cylinders of different-face widths; D-Mount plate cylinders; also latest developments in printing from rubber plates and design rollers. *Personnel:* F. Moss, A. R. Bradie, C. J. Fillare, J. Gerard, H. Crane, B. Goldsmith, J. Lecraw, J. Locke, A. Milidantri, H. Salmaggi, M. Solomon, L. Moss, F. Wible. *Hotel:* Shelburne.

**MULTISTAMP CO.** *Booth 267.* Marking methods using stencil duplicators on display. *Personnel:* J. H. Mason, L. M. Ostrow, F. W. Pennington. *Hotel:* Claridge.

**MYSTIK ADHESIVE PRODUCTS, INC.** *Booth 601.* Exhibit of pressure-sensitive tapes; pressure-sensitive print stocks and label stocks; bulk adhesives, coatings and sealers. *Personnel:* R. D.

...and **NOW** it's  
*sugar*

*California and*  
  
*Hawaiiian*  
**Sugar Refining Corp.**

has added

**SEAL-SPOUT**

... aluminum pouring spouts to their colorful packages of granulated cane sugar for consumer preference.



No longer will users be annoyed by spilled sugar. Now they can pour C & H right from the package into sugar bowls, measuring spoons or sprinkle it directly on their cereal.

**SEAL SPOUT Corp.**

MOUNTAINSIDE, NEW JERSEY



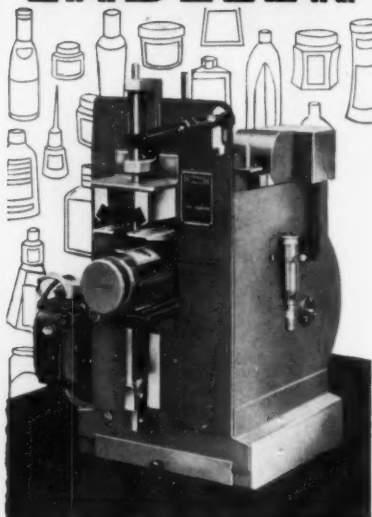
**The Only!**

# **LABELER**

THAT PROVIDES

**Greater Economy  
Greater Versatility  
Greater Efficiency**

## **THE ALL NEW NEWMAN LABELER**



**Solves ALL your  
Labeling Problems**

### **ONLY THE NEWMAN**

- Takes unlimited shapes of containers & labels.
- Change over for labels or containers in minutes.
- Semi and fully automatic bench size models.

Write now for FREE Descriptive Literature  
Please send me further information on the  
Newman Labeler—No obligation, of course.

Name .....  
Firm Name .....  
Title .....  
City ..... Zone ..... State .....

# **AMACO**

incorporated  
2601 W. Peterson Avenue  
Chicago 45, Illinois

Smith, W. J. Miller, S. L. Ostrenga,  
W. C. Brandt, D. R. Hager. *Hotel:*  
Ambassador.

**NASHUA CORP. Booth 150.** Exhibit of latest sealing tape dispensers with samples of improved Istitix plain and printed sealing tapes, strapping tape, reinforced plain and printed tapes, and labels for shipping, inventory and identification. *Personnel:* H. W. Bailey, J. F. McDermott, J. T. Winn, J. E. Driscoll, J. Hickey, B. Bloom, M. Radin, S. Nelson, H. R. Mortimer, A. Feldman, S. Smith, F. Lavey, L. Loring, S. Kolber. *Hotel:* Claridge.

**NATIONAL ANILINE DIV., Allied Chemical Corp.** (See Allied Chemical.)

**NATIONAL EQUIPMENT CORP. Booth 163.** Display of Short-A-Matic case sealer; Rose 5 IST wrapping machine; Rose FWT high-speed kiss, form, cut and twist-wrap machine. *Personnel:* W. H. Kopp, C. H. Greenberg, H. Greenberg, A. Carter, C. Balin, O. Frank. *Hotel:* Shelburne.

**NATIONAL FOIL CO. Booth 1302.** Exhibit showing new embossing dimension in foil making maximum use of light defraction. *Personnel:* W. A. Hunt, R. E. Hunt, D. W. Cowell, P. J. Cocuzza, V. Settelen. *Hotel:* Claridge.

**NATIONAL PACKAGING CORP. Booth 1208.** Display of plastic trays for packaging of fruit, produce, confectionery, baked goods, electronic parts; consumer tomato and apple packs. *Personnel:* W. E. Browning, F. H. Kimball, W. P. Borda, A. S. Houston, D. A. Hamel. *Hotel:* Shelburne.

**NATIONAL PAPER BOX MFRS. ASSN. Booths 141, 143.** Exhibit of new packaging ideas built into sample set-up boxes created by prize-winning design students; also award winners of annual Set-Up Box Promotional Competition. *Personnel:* N. T. Baldwin, R. Hershman, T. C. Greene. *Hotel:* Dennis.

**NEW ERA MFG. CO. Booths 644, 646.** Display of photographs of company machines and products produced on them; new high-speed "Whirlwind 185" knotter built by Graeber Stringing & Wiring Machine Co. to produce 11,000 pieces per hour. *Personnel:* J. E. Morris, F. J. Was, A. D. Poma, H. W. Plavier, K. J. Conrad, E. D. Smith. *Hotel:* Empress Motel.

**NEW JERSEY MACHINE CORP. Booths 505, 511.** Operation of new fully automatic Pony 75 round-bottle labeler; new double-turret Pony Express machine for fully automatic back and front bottle labeling at speeds to 65 bottles per minute; Label-Dat Challenger equipment for applying thermoplastic coded labels to bottles at speeds to 150 per minute, using electric-eye roll-label feed and imprinting device. *Personnel:* G. vonHofe, D. Wellbrock, A. Schaefer, K. Leeson, P. Heguy, M. Smith, J. Brown, B. Droge, R. Keller, D. Goddard. *Hotel:* Dennis.

**OLIN MATHIESON CHEMICAL CORP. Booth 1116.** Olin cellophane, Olin polyethylene, Frostkraft folding cartons, Frostkraft multiwall sacks, Frostkraft containers and Ecusta Paper products on display.

**OLIVER MACHINERY CO. Booth 637.** Exhibit of new Model #900 rotary imprinter-cut stacker with rewind for imprinting any size or type of copy on roll labels using 809 rotary imprinter unit, which imprints a predetermined number of labels and either cut-stacks them for hand application or rewinds labels back into roll form at speeds of 200 per minute; roll-type thermoplastic labels printed in from one to six colors; full process, screened and line designs printed on several different types of paper; adhesives for sealing labels on polymer films, polyethylene, Vitafilm, cellophane and laminated films. *Personnel:* V. P. Tuthill, J. R. Davies, S. H. Massingham, G. E. Matthews, W. A. Samiec, W. Lowthian, E. V. McCarthy, J. Zandstra, D. Semon, H. Jackle, R. Taylor. *Hotel:* Empress Motel.

**ORTMAN-McCAIN CO. Booth 1439.** Exhibit of non-skid spray applicating unit; Waxit hot-wax mist spray unit; stop-offset dry spray unit; low-pressure liquid spray unit; liquids, powders and hot-wax spray. *Personnel:* A. C. McCain, C. A. Turk, G. Cassidy, L. Price, R. Bean, D. VanGorder, T. Felgen. *Hotel:* Shelburne.

**OWENS-ILLINOIS GLASS CO. Booths 234, 242.** Glass Container Div. to show improved containers for foods, drugs, cosmetics, toiletries, household and chemical items, and beverages; new one-way beer bottle; new line of no-deposit beverage bottles; king-size packages for food items such as catsup and apple sauce; spice jars; plastic-coated-glass pressure packages; spray-coated glass containers and stock gallon containers with new finger-grip handle; Closure & Plastics Div. showing blown and pressed containers and bottles; propel-stick containers, powder boxes and pill boxes, and metal and plastic closures, package fitments; Kimble Glass Co. Div. showing Opticlear vials; private-mold perfume bottles; complete line of parenteral drug containers, including Color-Break ampoules, syringe cartridges, Neutraglas bottles and vials; aluminum-seal vials and opal-glass containers; Paper Products Div. highlighting a wide range of corrugated shipping boxes; new O-I C-flute board and other research developments. *Hotel:* Claridge.

**PACKAGING INDUSTRIES LTD., INC. Booth 352.** Exhibit of new Model S-15 semi-automatic blister heat-seal machine; new Model RFK-24 automatic blister-forming machine; also new Model FI film top-sealing machine for blisters. *Personnel:* H. A. Rohdin, C. C. Jacobson, J. Bambara, J. Drygulski. *Hotel:* Ambassador.

**PACKAGING INSTITUTE, INC. Booth 1517.** Technical accomplishments of 30 PI technical committees featured; also





**How did  
your printing look  
the last time you  
saw it used  
this way?**

Huber inks are formulated to stay put throughout your finishing operations—and throughout the *life* of your container.

We engineer our inks to your specifications...to insure the best in press performance and printing.

**J. M. HUBER CORPORATION**



Inks and Clays  
for the Container Industry

Sales Agents for  
the Dorr Rapi-Die Register



*we'll be there*



*you'll be there*



*let's get together!*



**BOOTH 251  
A M A PACKAGING SHOW**

To discuss  
Roto Bag and Holweg  
paper, film and foil  
converting equipment.

Roto Wrap  
packaging machines.

Hydro-Chemie  
thermoforming equipment  
for plastic containers.

**CONAPAC  
CORPORATION**

Division of Roto American Corp.  
120 East 13th Street - New York 13, N. Y.

message and contact service for members. *Personnel:* C. A. Feld, R. T. Walsh. *Hotel:* Colony Motel.

**PACK-RITE MACHINES**, Div. of Techtman Industries. *Booth 450.* Display of high-speed rotary heat-sealing equipment with folding device, ink code dater and hole punch; Holm automatic weighing and filling equipment for free-flowing and semi-free-flowing materials; high-speed rotary Plasti-Sealer for sealing polyethylene, etc.; air-operated robot jaw sealer; foot-pedal-operated jaw sealers; Hand-I-Seal irons and hotplate. *Personnel:* A. E. Pohl, E. Holm, Mrs. E. Holm, A. E. Jay, H. L. Vogt. *Hotel:* Tropicana Motel.

**PERMACEL**. *Booths 513, 517.* #165 Strap-It tight-band tape, a printable, reinforced, transparent tape with high-impact strength, good quick stick and extreme thinness; #951 printable metallized Mylar tape for labels resistant to moisture and heat, with high tear strength and non-fading colors; #44 clear cellophane tape for light packaging; dispensers for pressure-sensitive tapes; #727 colored flat-back paper packaging tape available in many colors, designed as a combination packaging and identification tape and used in sealing packages and bags, attaching premiums to packaged goods and combining two-in-one deals; complete line of adhesives for all packaging or sealing operations, including waterproof case-sealing and label-coating adhesive. *Personnel:* G. A. Fitzgerald, J. S. DeNoia, N. P. Hickok, A. M. Oppenheim, R. Rogers. *Hotel:* Claridge.

**PFAUDLER CO.**, Div. of Pfaudler Permutit, Inc. *Booth 653.* Display of new Model RP-210 10-station rotary piston filler with speed up to 300 cpm. and fast change-over for both can height and can diameter, available with through conveyor for filling glass, paper or pre-pack containers as well. *Personnel:* B. T. Clarke, H. E. P. Barta, W. D. Pheteplace, H. V. Taylor.

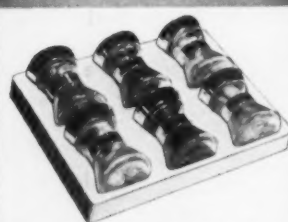
**PHOTOMATION, INC.** *Booth 1425.* Exhibit of photo-electric instruments as applied to packaging for full-line shut-off, quality control, proper fill in bottles and cartons, proper registration of labels, properly labeled, properly capped, etc. *Personnel:* E. Ross, R. W. Heimsoth. *Hotel:* Dennis.

**PHOTO PROCESS SCREEN MFG. CO.** *Booth 1227.* Display of jigs for silk screening all types and sizes of round containers; also jigs for screening odd-shaped containers and for flat screening. *Personnel:* T. S. Oteri, O. Genuardi, S. Oteri.

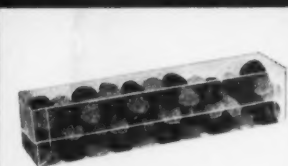
**PITNEY-BOWES, INC.** *Booth 554.* Exhibit of new Model 4800 package imprinting machine; several versions of Tickometer high-speed counting and imprinting machine; Model 3300-FH folding and inserting machine which folds and stuffs material into envelopes at speeds up to 4,000 an hour; several models of postage meters, mailing

## Transparent packaging with selling power...

Created through PLASTO-FILM'S imaginative designing, high production automatic equipment, and years of practical experience... Let us help you with your packaging problems.



Thermoformed plastic box insert designed for ABBOTT LABORATORIES



Crystal clear acetate box mass produced for MRS. SNYDER'S Minty Mites



Attractive carded blister pack created for PAPER MATE

*We invite your inquiries*

**Plastofilm INC.**  
916 WEST UNION AVENUE  
BOX 531 WHEATON ILLINOIS

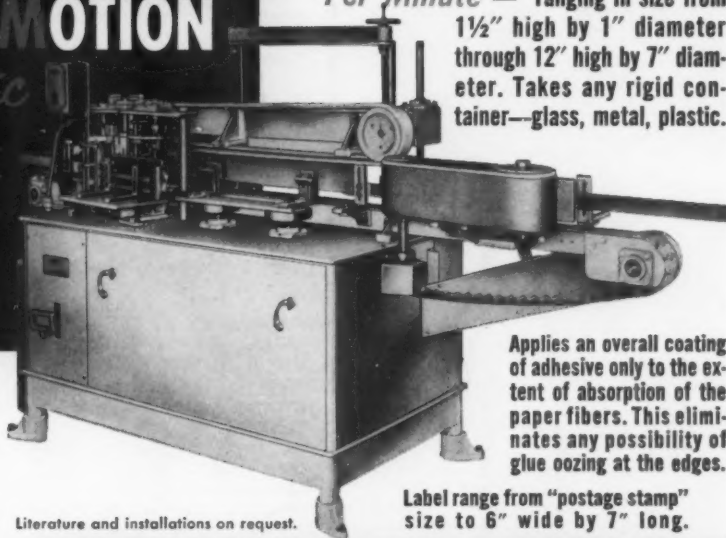


**mrmm**

# CONTINUOUS MOTION

*Fully Automatic*

# LABELING MACHINE



*Up to 150 containers  
Per Minute* — ranging in size from  
1½" high by 1" diameter  
through 12" high by 7" diam-  
eter. Takes any rigid con-  
tainer—glass, metal, plastic.

- mrmm** Changeover time at ab-  
solute minimum
- mrmm** Greater flexibility than  
ever before possible
- mrmm** No skilled help neces-  
sary to maintain

Literature and installations on request.

Applies an overall coating  
of adhesive only to the ex-  
tent of absorption of the  
paper fibers. This elimi-  
nates any possibility of  
glue oozing at the edges.

Label range from "postage stamp"  
size to 6" wide by 7" long.

**mrmm**

**mrmm COMPANY, INC.**

191 Berry Street Brooklyn 11, N. Y.

Manufacturers of a complete line of fully automatic and  
semi-automatic liquid filling and labeling equipment.

Visit Our Booth No. 203 at the A.M.A. Show

## COMPLETE ROTOGRAVURE CYLINDER SERVICE

- Copper Plating
- Engraving
- Grinding and Polishing
- Hard Chrome Plating

Since 1933—Pioneers in miniature gravure en-  
gravings for direct printing and offset gravure, on  
capsules, pillow packs, flexible tubings, labels,  
tapes, etc. Engraved to your specific needs, using  
gravure screens developed by us to obtain the  
finest possible print on your material.

Quality engraving on larger cylinders for pack-  
aging, gift wraps, cartons, laminates and other  
materials.

Send us your specifications for quotations.

**Roller Engraving Company Inc.**

48th Avenue at 37th Street  
Long Island City 1, New York.

attention...

## BAG MAKERS DISTRIBUTORS END USERS

**Koby offers you highest quality  
Converted Polyethylene . . . skill . . . service**

Whether you are a converter . . . distributor . . . or  
packager . . . Koby Bag offers you single-source con-  
venience as converters of all thicknesses of highest-  
quality polyethylene (.0006 to 10/m), to bags of any  
shape or size. Maybe you're not equipped to make your  
own packaging. Or perhaps you need assistance. Con-  
tact us to help you with your packaging requirements.  
Koby's know-how has refined the application of this most  
versatile film into a durable, low-cost packaging medium  
of plate-glass clarity and printability. Let Koby's skill  
with this versatile packaging power help you to display  
your product to its best advantage. Koby's offers you  
modern, consumer-minded packaging. We also make  
liquid-proof polyethylene drum liners. All sizes in stock.  
No order too small. No order too large. If it's a bag, we  
make it!

**KOBY Bag Company**

68 3rd Street • Brooklyn 31, N. Y. • Phone TRIangle 3-0794





**“HELLO KEYSTONE...**  
*you say we can expect  
 the polyethylene film  
 two days ahead of  
 schedule? Wonderful!”*

If you want “as promised” delivery on polyethylene film, sheet, tubing, lay flat, and gusseted—both printed and converted . . .

If you want “as promised” delivery on made-to-order polyethylene or cellophane bags . . .

You want Keystone Packaging Service! Keystone manufacturers, converts, prints, designs. And delivers *as promised!* Write or call today for free bag and roll stock samples—and for quotations on your requirements. Keystone Packaging Service, 555 Warren St., Phillipsburg, N. J.

**KEYSTONE**  
 flexible packaging

Keystone Packaging Serv., 555 Warren St., Phillipsburg, N. J.

scales and letter openers. *Personnel:* W. H. Wheeler, III, J. H. Grellner, D. A. Zoppino, F. Oeschger, Jr., V. S. Price. *Hotel:* Chalfonte-Haddon Hall.

**PLASTIC & COAL CHEMICALS DIV.,** Allied Chemical Corp. (See Allied Chemical Corp.)

**PLASTICS WORLD.** Booths 272. *Personnel:* C. W. Cleworth, G. W. Rhine, S. W. Jones, Jr., J. H. Goodenough, C. W. Cleworth, L. A. Pehrson, C. R. Stoddard, Jr., J. Cruickshank. *Hotel:* Shelburne.

**PLAX CORP.** Booth 463. Complete display of polyethylene plastic containers from ½-oz. to 15-gal. size; Polyflex sheet and film; thermoformed and folded containers; also packages overwrapped with Polyflex film. *Personnel:* R. E. Elder, S. F. Schilloci, W. Bolton, K. Thorn, J. Carlile, O. R. Henstrand. *Hotel:* Dennis.

**PNEUMA-FLO SYSTEMS, INC.** Booth 916. Display of various models of powder-spray units; Brookfield Viscosel automatic viscosity control; new model Pneuma-F10 spray gun featuring automatic refill design container of aluminum; samples of work with particular interest for those doing flexographic or rotogravure printing, laminating, coating or allied processes. *Personnel:* M. Weiss, E. A. Mitchell, G. Mitchell, T. Tice, H. R. Field. *Hotel:* Empress Motel.

**POLYKEN SALES DIV.,** The Kendall Co. Booth 1246. Exhibit of industrial pressure-sensitive tapes. *Personnel:* W. J. Hodges, P. P. Sikorski, D. H. Crawford, D. Lyons.

**POPPER & SONS, INC.** Booths 135, 137. Display of packaging equipment for drug and cosmetic industries; high-speed liquid fillers; washing equipment; automatic plugging machines; tablet and capsule counting equipment; tablet inspectors; chip and powder removers; high-speed folding-box imprints; fully automatic ampoule-printing machines; automatic and semi-automatic marking machines for glass, plastic, metal and cardboard items. *Personnel:* R. A. Popper, L. Heller, R. G. Illner, W. L. Popper, J. Cozzoli, G. A. Popper, S. Rozenberg.

**POTDEVIN MACHINE CO.** Booth 416. Display of Type Z 27-in. gluing machine; Type LM 6-in. label paster with semi-automatic feeder; Type MG 4-in. ductor roller margin gluer; Type 2R 12-in. coating machine; Type LA 6-in. label activator; top-side margin gluer; hot-melt seam extruder; Rawson semi-automatic labeler. *Personnel:* J. H. Richmond, R. A. Potdevin, J. S. Hawkins, J. S. Hamilton, S. Norton, J. Donohoe, C. Denton, C. E. Duerr, H. E. Hummel, D. Schroeder, M. B. Jones, A. G. Miller. *Hotel:* Dennis.

**PRINTING MACHINERY CO.** Booth 105. Exhibit of die-cutting machine; Sterling toggle-hook and base system

for mounting and registering flatbed letterpress plates; Warnock rotary-hook system for mounting and registering rotary letterpress plates. *Personnel:* L. Augustine, C. Brestel, J. K. Carlin, L. D. Metz. *Hotel:* Ambassador.

**PYROXYLIN PRODUCTS, INC.** Booth 1307. Literature and information on the use and functions of lacquer and hot-melt packaging materials available, including adhesives, protective coatings, decorative and functional coatings for paper and foil, adhesives for blister packaging, enveloping compounds, wax additives. *Personnel:* P. H. Yoder, D. Getz, R. E. Hollinger, J. B. Lowry, Jr., D. Fawkes. *Hotel:* Shelburne.

**QUICKPAK MACHINERY CORP.** Booth 618. Display of automatic polyethylene wrapping machine; smaller manual polyethylene wrappers and garment-bagging machines. *Personnel:* H. L. Reitzes, H. M. Reitzes, C. Reitzes, B. Richer.

**RAPIDS-STANDARD CO., INC.** Booth 1043, 1049. Conveying equipment as related to storing and warehousing of materials on display; A P C and powered conveyor which allows for accumulating of packages of various sizes on a powered conveyor without line pressure. *Personnel:* H. Rasmussen, W. Green, K. Maatman, A. Omedian, R. Sellers, E. Meleski. *Hotel:* Traymore.

**RHEEM MFG. CO.** Booths 1107, 1109. New developments in steel shipping-container industry; lining pails for protection of chemical and food products by company-developed centrifugal method. *Hotel:* Claridge.

**RIEDEL PAPER CORP.** Booth 363. Specialty Products Div. will display new and interesting packages made with flexible protective materials; separating and release papers as well as technical and industrial specialties; Carolina Div. display will show bleached-board folding cartons made with Foldcote and recent innovations in folding-carton construction. *Personnel:* C. E. Schaeffer, N. W. Postweiler, C. W. Hoffman, W. M. Riegel, W. F. Collins, E. G. Penn, J. B. Shields, W. R. Smickel, R. W. Schlien, R. A. Simpson, G. R. Hastaba, V. D. Brown, W. Butler, R. H. Lippincott, J. M. Male, J. W. Conley, H. A. Hughes, W. Endicott, R. C. Derby, G. Oakley.

**SEALAROUND CORP.** Booth 902. New polyethylene packaging equipment that seals on all four sides at one time, completely adjustable and requiring only one operator. *Personnel:* A. H. Mayer, W. Sherwood, A. Weislaus, N. Patinkin, R. Stone, R. Schroeder.

**SEMET SOLVAY DIV.,** Allied Chemical Corp. (See Allied Chemical Corp.)

**SHOPSIN PAPER CO.** Booth 620. Exhibit of new “mirror” foil; foil-laminated boxboard; foil-laminated tag stock; silver and gold colored foil gummed papers; illustrations showing foil laminations printed by gravure,





## CREATIVE PACKAGING FOR HER... by **WIRZ**

*The convenience. The wonderful variety of shapes and sizes. The colors and textures . . . and decorating possibilities. The sales appeal! The advantages of packaging your product for her—when you package it in a plastic bottle by Wirz.*

*Consider plastic bottles by Wirz for your cosmetics and pharmaceuticals. Also for a wide range of household and industrial items. Choose from a selection of standard shaped containers, or let Wirz create an exclusive design for you.*

*Wirz packaging specialists work wonders with plastics . . . and with collapsible metal tubes which they introduced in this country nearly a century ago. Let a representative acquaint you with all the advantages of Wirz plastic bottles, collapsible metal tubes and special extrusions.*

**A · H · WIRZ, INC.**

4th & COLE STREETS, CHESTER, PA.

Also Plants in Kentucky and New Jersey/Sales Offices: New York • Chicago • Los Angeles

RIGID CANS AND IMPACT EXTRUSIONS . . . AMERICAN EXTRUSION DIVISION, BROOKLYN, N. Y.



# When it comes to Marking Plastics



## it's PEERLESS for Quality and Economy

### MANUFACTURE . . . when roll leaf is part of your product.

Dials, Gauges, Rulers, etc. must be marked clearly and permanently. The Peerless Process of Roll Leaf Marking provides an easy, economical method.

### IDENTIFICATION . . . speed up assembly operation . . . avoid mistakes.

Small or large plastic parts and products, wiring, perforated panels, numbered and lettered diagrams, etc. lend themselves to Peerless Roll Leaf Marking.

### LABELLING . . . lifetime protection for your trade name.

A Peerless Roll Leaf "label" does not wear or rub off easily because it is engraved into the surface of the material, forming a permanent, integral part of the product.

### DECORATION . . . add distinction and buy-appeal to your product.

Monochrome or multicolor designs may be faithfully and permanently reproduced by the Peerless Process of Roll Leaf Marking. Submit your problem to us.

*The Peerless Process of Roll Leaf Marking produces engraved and embossed results at printing speeds, in a wide range of colors including gold and silver. Peerless manufactures its own marking machinery to meet your plant requirements. Write for a free useful sample of Peerless Roll Leaf Marking and a copy of Peerless Folder PLS4.*

**PEERLESS ROLL LEAF  
COMPANY, INC.**

4511-4513 New York Ave., • Union City, N. J.

#### BRANCH OFFICES:

BOSTON • CHICAGO • Peerless Roll Leaf Division • GANE BROS. & LANE, INC.

#### REPRESENTATIVES:

ST. LOUIS • LOS ANGELES • SAN FRANCISCO • LOUISVILLE • MONTREAL • LONDON, ENG.



letterpress, offset, silk screen and flexography. *Personnel:* M. Shopsin, S. Shopsin. *Hotel:* Shelburne.

**SIGNODE STEEL STRAPPING CO.** Booths 1016, 1018, 1020. Display of fully automatic power strapping machine; air-powered and electric-powered strapping tools; power strap feeders; steel strapping; dispensers; cutters and accessories; also newly developed strapping applications for industry. *Personnel:* J. M. Moon, M. C. Carlson, A. N. Perry, R. E. Frase, S. E. Heymann, C. H. Carlson, A. Pearson, R. L. Knapp, J. P. Ahern, J. F. Beckman, T. E. Noon. *Hotel:* Dennis.

**SIMCO CO.** Booth 1320. Exhibit of static eliminators for all types of film converting and packaging machinery, including metal-encased type, general-purpose eliminator; Super Service unit, completely encased for minimum maintenance; shockless static bar for use where fire hazard may be present; also anti-static cleaning devices incorporating air with static elimination; electrostatic locator for locating and measuring static charges; Neutro-Stat anti-static spray in convenient aerosol containers and in bulk for application to plastics materials. *Personnel:* D. Simons, W. W. Levy, H. A. Schweriner. *Hotel:* Empress Motel.

**SIMON ADHESIVES PRODUCTS CORP.** Booth 1054. Exhibit of method of manufacturing pressure-sensitive labels from roll label stock; samples of finished roll-type labels; methods of using roll-type labels; methods of dispensing and applying roll-type pressure-sensitive tapes; also new Mylar tapes, laminates and equipment for dispensing these tapes. *Personnel:* S. Simon, A. Berk, J. R. Orlando, R. P. Driscoll, J. Fernandez. *Hotel:* Traymore.

**SIMPLEX PLANT, FMC Packaging Machinery Div., Food Machinery & Chemical Corp.** Booths 520, 526, 530. Display of Model 210 side-weld bag-making machine with twin folding unwinds and split draw rolls to produce side-weld bags from two separate printed webs at speeds of 170 to 220 bags per minute. *Personnel:* W. R. Huguenin, G. C. Jones, M. W. Smith. *Hotel:* Dennis.

**SIMPLEX PLASTIC PRODUCTS, INC.** Booth 1415. Various types of packages on display using clear and opaque vinyls for more effective visible display of merchandise. *Personnel:* M. Kern, D. Kern, J. Rosenblum. *Hotel:* El Dorado Motel.

**SINCLAIR & VALENTINE CO.** Booth 413. Exhibit of printing inks for every type of packaging; outstanding examples of package printing; specialty inks such as IBM-S&V magnetic ink for electronic sorting. *Personnel:* H. J. Soriano, L. M. Pfister, T. B. Buchanan, B. M. Beall. *Hotel:* Traymore.

**SMITH, H. P., PAPER CO.** Booth 122. Exhibit of Polycel, metallic Polycel and

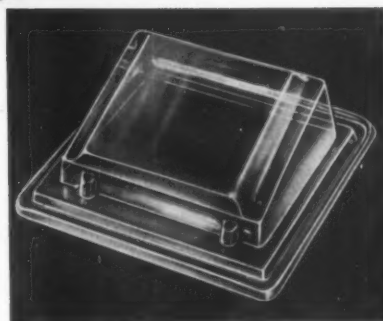


# HANDLE THE MERCHANDISE, PLEASE!



- Nixon Butyrate protects it
- Seals in the gleaming, fresh appeal
- Gives a picture window view
- Keeps its own clarity and shape through hazards of shipping and display

For all kinds of rigid packaging — light or heavy duty — Nixon produces quality sheet material which can be easily and inexpensively formed or fabricated.



*See-through bubble of Nixon cellulose acetate butyrate was vacuum formed by Valley National Corporation, Milldale, Conn.*

CELLULOSE ACETATE • CELLULOSE ACETATE BUTYRATE • RIGID VINYL • HIGH IMPACT STYRENE

# nixon PLASTICS

NIXON NITRATION WORKS • FOUNDED 1898 • NIXON, NEW JERSEY

Phone — New Brunswick Charter 9-1121, Metuchen Liberty 9-0200, New York Ext. WOrth 4-5290. Chicago Office, 510 No. Dearborn St., Michigan 2-2363. St. Louis, C. B. Judd, 3687 Market St., JEfferson 5-8082. Cleveland, E. H. Alexander, 20605 Kings Highway, WYoming 1-2863. Leominster, Mass., C. A. Dovidio, Phone 7-2120. Canadian Distributor: Crystal Glass & Plastics Ltd., 130 Queens Quay East, Toronto, Ontario.



# PLAST #300 #300 CRAFT

**NEW!** Low cost  
solution to your  
vacuum-forming  
problems!



**COSTS  
ONLY \$895**

F.O.B. Newark \$25 Crating Charge

Check these features  
of the "300" Vacuum  
Forming Machine:

- This 15" x 20" power-activated floor model has been designed to meet all your production requirements.
- **EFFICIENT DRAPE ACTION**—Provided by powerful air cylinder, controlled by 4-way valve, 8" draw.
- **SPEED CONTROLS**—Allow speeding-up or slowing-down of drape action in either direction.
- **PRESSURE REGULATOR**—Complete with air filter & lubricator.
- **ELECTRIC TIMER**—Resets unit automatically at the end of each forming. (Loading and operating cycle takes only 20 seconds).
- **IMPROVED HEATER**—Gives maximum speed with minimum power consumption.
- **ROLL FEEDER**—Mounted on side of machine for economical production.
- **ADJUSTABLE FRAME** (Optional)—fabricated of sturdy magnesium bars, gives maximum material economy when using sheet.
- **BLOW-OFF CONTROL**—Foot-operated to speed separation of moulding from mold.
- **SMOOTH ACTION**—Assured through utilization of roller bearings.
- **WIDE VARIETY OF MATERIALS** can be used, including polyethylene, polystyrene, vinyl, acetate, butyrate, and extruded acrylics. Never before SO MUCH MACHINE for SO LITTLE COST!

VISIT US AT BOOTH #1509 DURING  
THE PACKAGING SHOW AND SEE THE  
"300" IN FULL PRODUCTION!

**PLAST-O-CRAFT, INC.**

503 McCarter Highway

Newark, N.J. Mitchell 3-6760

**NOW AVAILABLE!** SELF-LIQUIDATING LEASE PLAN  
ON THE "300". WRITE FOR  
FULL INFORMATION TODAY.

complete line of coated, transparent packaging materials; polyethylene-coated paper, foil, film and cloth. *Personnel:* C. C. Sherman, J. C. Davis, A. E. Gerken, J. F. Pendexter, G. H. Sullivan, R. J. Hummer, C. L. Bither. *Hotel:* Ambassador.

**SOABAR CO. Booth 1204.** Display of automatic marking equipment for roll tickets and labels, including pressure-sensitive, heat-seal, gummed, ungummed and various tag stocks; Model 20W machine which marks, counts, cuts or rewinds labels up to 1 by 1½ in.; Model 22W machine which marks, counts, cuts or rewinds labels up to 4 by 1½ in.; Model 23 which marks, counts, cuts or rewinds labels up to 4 by 2½ in.; Model 10TL Thermaply which marks and attaches heat-seal labels up to 2½ by 1½ in. *Personnel:* C. B. Hutchinson, S. N. White, B. S. Gowdy, T. B. Clute, O. Turran, W. A. Roberts, G. Nixon, J. Meehan. *Hotel:* Dunes Motel.

**SOHN MFG., INC. Booth 1554.** "Pint-Size" flexographic label maker featured; also new 5 by 6 flexographic label maker known as "Big Brother" to pint-size model. *Personnel:* C. Desloch, L. Thiessen, D. Jenkin. *Hotel:* Tropicana Motel.

**SOUTHERN ADHESIVES CORP. Booth 204.** Joint exhibit with F. G. Findley Co. and Union Paste Co. showing typical packaged and converted products on which company adhesives are used; display of new concept in automatic case sealing. *Personnel:* R. Crowell, G. Rilee, J. Potts, W. Hazelgrove. *Hotel:* Dennis.

**SPEEDRY PRODUCTS, INC. Booth 112.** Giant magic markers on display. *Personnel:* S. N. Rosenthal, C. Marmon, M. Raymond, J. G. Alexander. *Hotel:* Sheraton-Ritz Carlton.

**SPENCER CHEMICAL CO. Booths 1305, 1404.** Walk-through display with theme "A Plastic for Every Package"; new polymorphous "Poly-Eth" polyethylene general packaging film with high-impact strength and high optical properties; also nylon films and "Poly-Pro" polypropylene films. *Personnel:* F. Pyle, E. Stevens, R. Bailey, B. Roher, D. Boldt, B. Bridgen. *Hotel:* Chalfonte-Haddon Hall.

**STANDARD INSTRUMENT CORP. Booth 1421.** Demonstration of automatic control of conveyORIZED operation, including photo-electric inspection, rejection, counting and control, productive-time recording with production totals recorded on tape and keyed to time of day; new Robot-Eye miniaturized photo-electric controls with flexible plug-in interconnection of lamp, cell and amplifier; new Tally-Count electronic predetermining counter which controls package-filling operations automatically at speeds up to 100 per second, with complete range of plug-in accessories such as footage counters, photo-electric sensing devices. *Person-*

*nel:* E. J. Zeitlin, J. R. Schoenbaum, J. Billis, M. J. Zeitlin, N. Pearlman. *Hotel:* Empress Motel.

**STANDARD PAPER BOX MACHINE CO., INC. Booth 1558.** Exhibit of Kama metal-edge machine; corner cutter; Quad-stayer conversion kit to thermoplastic; record-album-making machinery; special gluing machines; board-scoring machines. *Personnel:* P. Adams, A. Adams. *Hotel:* Ambassador.

**STANFORD ENGINEERING CO. Booths 1137, 1145.** Exhibit of web guides, doctor machines, slitters, turret rewind and unwind equipment. *Personnel:* W. T. Stanford, Wayne T. Stanford, O. E. Stanford, R. W. Payton, G. E. Mansfield, G. W. Keates. *Hotel:* Shelburne.

**STERLING FLEISCHMAN CO. Booth 1457.** Manually operated or battery-powered one-man drum lift featured; also other drum-handling equipment. *Personnel:* M. M. Fleischman, B. C. Fleischman, P. I. Meyer, J. Bolger.

**STOFFEL SEALS CORP. Booth 661.** New Safe-Lok Prestige Seal which can be permanently attached to almost any product quickly and without the aid of tools or machinery to provide a tamper-proof, easily removable seal; all types of seals, sealing devices and tags used in industry for protection and/or identification. *Personnel:* H. F. Stoffel, H. A. Lazier, T. G. Keller, R. P. Freybourg, J. B. Betti, H. F. Dalmolen. *Hotel:* Ritz Carlton.

**STOKES & SMITH PLANT, FMC Packaging Machinery Div., Food Machinery & Chemical Corp. Booths 520, 526, 530.** *Personnel:* J. R. Sonneborn, J. Y. Albertson, W. R. Huguenin. *Hotel:* Dennis.

**SWIFT & CO., Adhesive Products Dept. Booths 641, 645.** Display of new, easy-clean-up, high-speed resins for packaging; new high-heat-resistant laminating adhesives; packaging adhesives for canning industry including resin lap-end paste, hot pick-up gums, high-speed water-resistant case-sealing adhesives, easy-open case-sealing adhesives and palletizing adhesives. *Personnel:* S. E. Carroll, W. W. Truxes, C. S. Young, A. W. Boyd, M. L. Lundt, H. R. Adamson, C. F. Patterson, C. W. McHaffie. *Hotel:* Shelburne.

**SWITZER BROS., INC. Booth 1423.** Exhibit of outstanding packages printed in Day-Glo; Day-Glo inks for gravure, letterpress, lithography, screen process. *Personnel:* G. D. Russell, W. Geib, W. S. Hart. *Hotel:* Lombardy Motel.

**SYNTRON CO. Booth 1341.** Exhibit of electric vibrators; vibratory feeders; motorized flow-control valves; hopper-level switches; vibratory packers and vibrating parts feeders. *Personnel:* A. M. Metz, T. S. James, E. B. Junker, E. A. Kreuder, J. K. Campbell, F. X. Waldvogel, H. Kiefer, J. R. Skel-



F.D.A.

Enactment of the Food Additives Amendment of 1958 has resulted in many problems for the packaging industry. Paper converters and manufacturers of containers are deeply concerned with the misunderstandings that have resulted from present interpretations and applications of this Amendment to the manufacture of packages.

As a major supplier of printing inks for all types of packages, Sinclair and Valentine Co. is actively keeping abreast of all developments and new interpretations of this legislation.

At this time, very few of the raw materials used in the manufacture of printing inks are on the approved FDA list. Fortunately, however, in many packages the ink film is not in direct or indirect contact with the foodstuff. As clarification is received, and additional ink components are granted FDA approval, the technicians and chemists at S&V will incorporate them into ink formulations. Since printing inks are only a small part of the total package it will probably be necessary to submit the entire package to FDA for complete approval.

Sinclair and Valentine's continuing policy of service and customer assistance is particularly appropriate under today's conditions. Ink engineers, specialists in the field of packaging inks at any of the 45 S&V plants throughout the United States, will be happy to consult with you... helping in every way possible with any of your packaging problems.



**SINCLAIR and VALENTINE Co.**

DIVISION OF AMERICAN-MARIETTA COMPANY  
611 West 129 Street, New York 27, N. Y.





## Solve your Difficult Marking problems

### with **KENSOL** HOT STAMPING PRESSES

Kensol Presses are available in three pressure ranges: Light-Weight, Medium-Weight, and Heavy-Duty.

The proper model is available to meet any production requirements: Hand-operated, Air-operated, Semi-Automatic & Completely-Automatic.

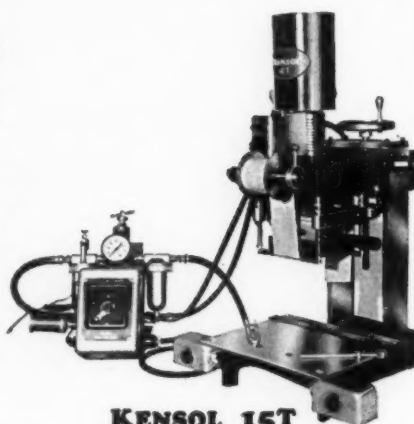
Compressed air operation adjustable electric dwell-timer, thermostat heat control and rugged construction are a few of the features which assure fine quality marking.

### and **OLSENMARK** ROLL LEAF

Fine quality, economically priced roll leaf in genuine gold, imitation gold and silver, and both flat and Enamel pigment colors.

*Write for complete literature!*

Specialists in Quality Marking Equipment and Supplies for over 30 years



**KENSOL 15T**  
Light-Weight  
Air-Operated Power Press

**OLSENMARK**  
*Corporation*

124-132 WHITE ST., NEW YORK 13, N. Y.

are you acquainted with

the manufacturers' literature page

You ought to be. It's the page, in every issue of MODERN PACKAGING Magazine, that describes a wide variety of pamphlets, brochures, and other manufacturers' publications which are currently available *without charge*.

To obtain any of the literature which is listed, you merely fill in and mail the

postage-free reply card. We do the rest. Look for the Manufacturers' Literature Page in each issue of MODERN PACKAGING. It is easy to recognize because it is printed on heavy paper. It is your key to detailed information about packaging equipment, supplies and services.

A Service of **MODERN PACKAGING**  
**A BRESKIN PUBLICATION**

Authority of the Field for Thirty-Two Years

575 Madison Avenue, New York 22, N.Y.

ton, S. J. Garvin, A. Solakian, S. D. St. Clair.

**TECHNICAL TAPE CORP.** Booths 610, 612. Exhibit of new pressure labels; special packaging tapes in dispensers; also polyethylene produce bags. *Personnel:* M. R. Stohl, B. Jacobs, B. Keith, H. Deutsch, M. Tobias. *Hotel:* Sheraton-Ritz Carlton.

**TEE-PAK, INC.** Booth 1553. Examples of multipackaging with improved printing inks and techniques using seamless, transparent cellulose band to be featured. *Personnel:* I. H. Dennen, F. J. Pool, W. J. Hlavacek. *Hotel:* Shelburne.

**THATCHER GLASS MFG. CO., INC.** Booth 564. Display of general-line glass containers; consumer glass products; plastic squeeze tubes of polyvinyl chloride, polyethylene and linear polyethylene; secondary cellulose closures and plastic closures. *Personnel:* J. Welsch, H. E. Griffith, J. S. Adams, R. M. DeGarmo. *Hotel:* Claridge.

**THOMSON-NATIONAL PRESS CO.** Booth 1420. Tel-A-Story slide projector featuring views of Bobst die-cutting and stripping equipment; samples of work performed on die-cutting, stripping, embossing and printing presses. *Personnel:* A. Aronson, J. Millan, J. Hipple, E. H. Rosenberg. *Hotel:* Traymore.

**TIPPER TIE PRODUCTS OF N. J., INC.** Booth 1448. Automatic casing-typing machines for both natural and artificial casings and bags on display. *Personnel:* A. O. Steckman, M. Tipper, B. J. Orr. *Hotel:* Dennis.

**TOLEDO SCALE, Div. of Toledo Scale Corp.** Booth 1140. Exhibit of new Remo-print Printweigh "450" which provides printed weights at the scale and transmits weight data to remotely located office machines; Model 9460 automatic, in-motion checkweigher, providing accuracy of approximately 1 part in 3,000 with a range of from 50 to 200 lbs. at speeds up to 40 units per minute. *Personnel:* J. J. McLellan, J. H. Aufderheide, C. S. Napp, R. N. Rockwell, J. H. Maier, M. E. Holmes, H. B. Sanford. *Hotel:* Claridge.

**TOMPKINS' LABEL SERVICE.** Booths 664, 666. Display of pressure-sensitive, heat-seal bag-header; continuous-roll, greaseproof-insert, gummed and ungummed labels on actual products and packages; labels for use with all types of high-speed automatic labeling equipment and their application to new packaging films and materials; also Presto-Mark marking system. *Personnel:* J. Tompkins, W. Baile, R. Norris, W. Schlegel, E. Friday, C. Orth, S. Orr, D. Wright. *Hotel:* Claridge.

**TRI-STATE PLASTIC MOLDING CO.** Booth 628. Display of injection-molded, clear, rigid-plastic containers in various shapes and sizes, including round, square, oblong, and also hinged covers. *Personnel:* G. Kelly, C. L. Mayer. *Hotel:* Chalfonte-Haddon Hall.



# 60 STOCK SIZE FOLDING CARTONS

**for MAILING  
for PACKAGING**

MADE FROM  
**VIRGIN KRAFT BOXBOARD**  
ALL CARTONS MEET  
**FEDERAL SPECIFICATIONS**

1 x 4 x 6 1/4	2 1/2 x 2 1/2 x 4
1 x 8 1/2 x 11	2 1/2 x 2 1/2 x 6
1 1/4 x 2 x 3	2 1/2 x 2 1/2 x 8
1 1/4 x 2 1/2 x 4 3/4	2 1/2 x 3 1/2 x 5 1/2
1 1/4 x 3 1/2 x 3 1/2	2 1/2 x 3 1/2 x 6 3/4
1 1/2 x 1 1/2 x 3	2 1/2 x 4 x 6 1/4
1 1/2 x 1 1/2 x 4	2 1/2 x 8 1/2 x 11
1 1/2 x 2 1/2 x 3 1/2	2 1/2 x 2 1/2 x 2 1/2
1 1/2 x 2 1/2 x 5 1/4	3 x 3 x 4
1 1/2 x 3 1/4 x 5 1/4	3 x 3 x 6
1 1/2 x 5 1/2 x 7 3/4	3 x 3 x 8
1 1/2 x 8 1/2 x 11	3 x 3 x 10
1 3/4 x 2 1/2 x 4	3 x 5 1/2 x 5 1/2
1 3/4 x 2 1/2 x 3	3 x 5 1/2 x 8 1/2
1 3/4 x 3 1/4 x 6 3/4	3 x 8 1/2 x 11
1 3/4 x 2 x 3 3/4	3 1/2 x 5 x 7 1/4
2 x 2 x 3	3 1/2 x 3 1/2 x 3 1/2
2 x 2 x 4	3 1/2 x 4 1/2 x 5
2 x 2 x 7	3 1/2 x 6 x 8 1/2
2 x 2 1/2 x 4	4 x 4 x 4
2 x 3 x 5 1/4	4 x 4 x 6
2 x 3 x 11	4 x 4 x 8
2 x 3 1/2 x 5	4 1/4 x 4 1/4 x 4 1/4
2 x 4 1/2 x 7 1/4	6 x 8
2 x 5 x 11	9 x 11 1/2
2 x 8 1/2 x 11	11 x 13 1/2
2 1/4 x 2 1/2 x 5	12 3/4 x 15
2 1/4 x 4 1/4 x 6	9 3/4 x 12 1/4
2 1/4 x 7 x 7	13 x 18
2 3/4 x 4 3/4 x 7 3/4	17 x 21

ABOVE SIZES IN STOCK  
FOR IMMEDIATE SHIPMENT.  
SEND FOR PRICE LIST and SAMPLES

## SHORT RUNS *Our Speciality*

If none of the stock sizes fit your requirements, we can make as few as 100 special size cartons at a very modest cost. Send us your item or size. QUOTES and SAMPLES on REQUEST

**FREE**  
CALLING CARD FILE



We would like to send you this gift to put on your desk — your name on the cover. Type your name on your letterhead and send it to us. No obligation.

**CALUMET CARTON CO.**  
Folding Division • Homewood, Illinois

TRI-WALL CONTAINERS, INC. *Booth 100.* Tri-Wall Pak containers on display. *Personnel:* A. Goldstein, E. Waldorf, H. Anderson, J. Delehanty, M. Thayer, L. Woodrum, T. Lawrence, H. Person, M. Schroeder. *Hotel:* Traymore.

TRONOMATIC MACHINE MFG. CORP. *Booth 1438.* Automatic pressure-forming, die-cutting, heat-sealing and fabricating equipment for thermoplastic materials on display; also automatic molding equipment for expandable polystyrene beads. *Personnel:* J. Swick, J. Hines, V. Hanford, J. Mullen, S. Rosen. *Hotel:* Dennis.

UNION CARBIDE PLASTICS CO. *Booth 353.* Principal end-use advantages of polyethylene film and coated products; versatility of application and new developments in polyethylene raw materials and processing techniques to be featured; development of commercial automatic machinery for handling flexible polyethylene packaging materials. *Hotel:* Traymore.

UNION PASTE CO. *Booth 204.* Joint exhibit with F. G. Findley Co. and Southern Adhesives Corp., showing typical packaged and converted products on which the company adhesives are used; display of new concept in automatic case sealing. *Personnel:* B. Rader, F. Sebbard, A. B. Crowell, Jr., C. Psyrrus, P. Juley, R. Brink, J. Ramseyer, D. Valcovic, D. Look, L. Schriber, H. Cutts, T. Seaver, H. Richards. *Hotel:* Shelburne.

UNION STEEL PRODUCTS CO. *Booth 322.* Exhibit of wire-mesh collapsible shipping, storing and in-process containers; also slat, curve conveyors, packs. *Personnel:* H. D. Gardner, W. C. Neumann, W. C. Bunn, W. H. Schermer, H. J. Aughton, W. C. Federhart, J. S. Howie. *Hotel:* Dennis.

U. S. ENGINEERING CO. *Booths 149, 151.* Parts-feeding and orienting equipment featured; standard Hoppermatic parts feeders; new Hoppermatic Model "R"; new plastic and glass vial unscrambler. *Personnel:* B. R. Garrett, K. J. Kortvelesy.

U. S. INDUSTRIAL CHEMICALS CO. *Booth 1231.* In-line operation of blown-film extruder, treater, printer and bag-making machinery; new resin attractive for packaging for profit; technical center for answering packers' problems. *Personnel:* V. McCarthy, A. J. Antuck, E. C. Richardson, J. Moffett, P. Gisser, A. C. Brooks, J. H. Hallowell, T. M. Bennett, Jr., G. W. Rementer. *Hotel:* Traymore.

U. S. PRINTING & LITHOGRAPH Div., Diamond National Corp. *Booth 1027.* Wide variety of recent multi-colored packaging and advertising materials printed by letterpress, offset lithography and gravure, including folding cartons, labels and box wraps in paper, boxboard and foil; multipacks. [Continued on page 374]

a bent  
conical cap



a capping problem

## HOW PMC SOLVED IT!

Screwing a high, bent conical cap onto a triangular bottle, presented a costly capping problem to a well-known pharmaceutical manufacturer.

No machine in existence could accommodate a cap and bottle with so unusual a design. As a result, in an otherwise completely mechanized production, capping was performed manually. The outcome was obvious — production was bottlenecked at this point — labor costs were extremely high, but unavoidable.

Called in to solve this problem, PMC, manufacturers of automatic capping and inserting equipment for "problem" closures, designed a special rotary-capping machine. This machine feeds the high, bent conical caps from a random bulk supply, accurately aligns and then screws them onto the filled, triangular bottles. Production speed is as high as 120 bottles per minute with a 4 oz. bottle. By a simple interchange of parts, the machine handles 16 oz. bottles at speeds up to 80 per minute.

If your production is faced with a similar capping problem or, you plan to introduce a package incorporating an unusual closure, PMC can help you. Just call or write for further information.

**PMC INDUSTRIES**  
293 Hudson St., Hackensack, N.J.  
Diamond 2-3684



**over 1000 users  
can't be  
wrong!**

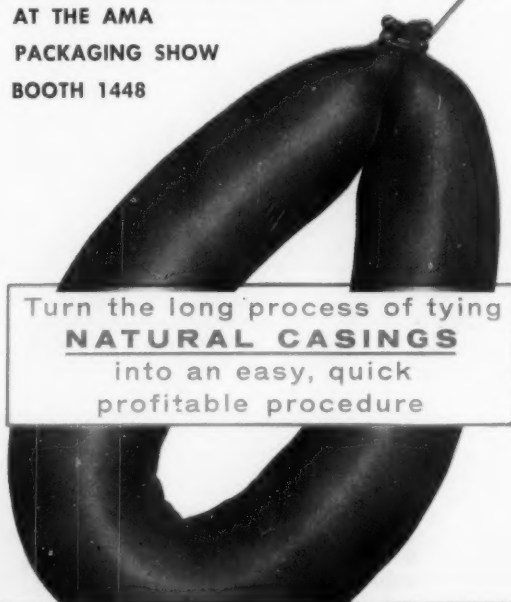
Acceptance of **Tipper Clipper**  
and **Tipperette** Second Tie  
Machines has been phenomenal.  
Here's why . . .

*Tipper Clipper*  
and  
*Tipperette*

are the **ONLY**  
semi-automatic  
tyers  
for

**NATURAL CASINGS**

SEE THESE TYERS IN ACTION  
AT THE AMA  
PACKAGING SHOW  
BOOTH 1448



Turn the long process of tying  
**NATURAL CASINGS**  
into an easy, quick  
profitable procedure



Both were specially designed  
for applying aluminum clips  
on **NATURAL CASINGS**  
--- on artificial casings and  
bags as well.

If you are not a user of Tipper  
Clipper or Tipperette, see  
how you can turn the long  
process of tying **NATURAL  
CASINGS** into a quick prof-  
itable procedure.

*There's a clip for every product*

**TIPPER TIE, INC.**

2165 Morris Avenue, Union, N. J.  
MURdock 8-8988

\*Patented - U. S. A. - Canada



# FOR EXTRUDING PACKAGING MATERIALS

with POINT-OF-SALE

## PUNCH

BLOWN TUBING  
BLOW MOLDING  
SHEET  
COATING FILM



There's a  
**HARTIG EXTRUDER**  
and Matched Auxiliary Equipment  
for every job requirement

size, inches	L/D ratio	effective length of screw, inches	nominal capacity lbs/hr	heat on barrel no. of bands	watts per band (max.)	control zones		temp. controls (proportioning) number	thrust bearing capacity, lbs	floor dimensions, inches	weight approx. lbs	motor- drive hp
						barrel	die head					
<b>1 1/2</b>	21:1	31 1/4	30-40	4	1750	2	1	3	16,380	50 x 26	1250	3
<b>2 1/2</b>	15:1	38	70-95	6	2500	2	1	3	71,100	66 x 41	3200	10-15
	21:1	53 3/4	100-130	9	2500	3	1	4	71,100	81 x 41	3500	10-15
	24:1	60 1/4	110-150	10	2500	3	1	4	71,100	88 x 41	3800	10-15
	30:1	75 1/4	120-170	14	2500	4	1	5	71,100	100 x 41	4000	10-15
<b>3 1/2</b>	21:1	73 1/4	210-280	13	2500	3	1	4	221,900	111 x 70	5000	25-40
<b>4 1/2</b>	15:1	60 3/4	220-300	9	2500	4	1	5	221,900	105 x 70	5350	40-50
	21:1	93 1/2	300-420	16	3200	4	1	5	221,900	138 x 70	6000	40-60
	24:1	108 1/4	350-480	19	3200	4	1	5	221,900	153 x 70	7000	40-75
	30:1	135	410-540	24	3200	5	1	6	221,900	180 x 70	8000	40-75
<b>6</b>	15:1	89 1/4	400-530	10	6000	4	1	5	279,500	148 x 82	7200	50-60
	21:1	125 3/4	550-750	14	6000	4	1	5	279,500	183 x 82	8000	50-100
	24:1	144 1/2	630-860	20	6000	5	1	6	279,500	203 x 82	8500	50-150
	30:1	180 1/4	700-950	26	6000	6	1	7	279,500	236 x 82	9000	50-200
<b>8</b>	15:1	112	700-950	15	8000	4	1	5	370,000	179 x 100	8200	75-150
	21:1	168	1000-1300	22	8000	5	1	6	370,000	234 x 100	9000	75-200
	24:1	192	1100-1500	26	8000	5	1	6	370,000	258 x 100	10,000	125-250
	30:1	240	1200-1700	34	8000	6	1	7	370,000	306 x 100	12,000	150-300
<b>10</b>	21:1	210	1500-2100	30	8500	5	1	6	465,000	310 x 120	13,000	150-300
<b>12</b>	7:1	84	1000-1500	9	10,000	2	1	3	525,000	206 x 125	11,500	200-300
	21:1	252	2300-3000	30	10,000	5	1	6	525,000	365 x 125	17,500	200-350



Send for  
Your Copy

of the new illustrated booklet describing the line of Hartig Extruders and Matched Auxiliary Equipment.

## HARTIG EXTRUDERS



Waldron-Hartig Division  
Midland-Ross Corporation  
P.O. Box 531, Westfield, N. J.



## ON ANY PACKAGING MACHINE

there is a place where

## IMS SILICONE FLUID SPRAY

**WILL CUT  
YOUR COST**



**Anywhere Any Packaging Material  
Tends to Stick . . .**

**IMS SILICONE SPRAY** will cut your scrap and stoppage rate—Save You Money! Try it on your packaging line—you'll see why almost overnight this amazing anti-stick material has become a necessity in the modern high-speed packaging field!

**PRICES: \$ 2.00 Per Sample Can  
\$ 18.00 Per Unbroken Dozen  
\$197.40 Per Unbroken Gross**

**Still lower prices on larger orders  
shipped in one gross lots on any  
schedule you request.**

**Delivered FREE Anywhere in the U. S. A.**

## INJECTION MOLDERS SUPPLY COMPANY

3514 LEE ROAD • CLEVELAND 20, OHIO

[Continued from page 371]

display containers, point-of-purchase advertising displays and posters; new ideas and innovations in packaging; customer redesign programs highlighted. *Personnel:* F. G. Blankenheim, B. F. Cake, F. A. Denecke, H. B. Fertig, D. C. Grant, J. Guatelli, J. Harris, R. P. Krane, I. Koenig, W. J. Koslo, R. Kramer, J. Lambie, R. A. Mehler, H. C. Minnich, K. E. Oelke, W. J. Volz, Sr., K. J. Wollaeger. *Hotel:* Shelburne.

**VARIGRAPH CO.** *Booth 1050.* Demonstration of lettering equipment. *Personnel:* L. S. Jensen, R. L. Leinoff, F. W. Chamberlin. *Hotel:* Dennis.

**VARN PRODUCTS CO., INC.** *Booth 1523.* Display of line of non-offset sprays, both powders and solutions, to reduce pressroom dusting and produce smoother finish on printed packaging surfaces; new 50-lb. carton for spray powders offering advantages in handling, stocking, palletizing and dispensing of product; also standard line including 20 chemicals and solvents for lithographic, letterpress, flexographic and gravure printing. *Personnel:* V. VonZwehl, J. Conroy, J. VonZwehl. *Hotel:* Saxony.

**VERNER, B. & CO., INC.** *Booth 146.* Demonstration of multipress imprinting-marking machine running flat folded cartons, paper goods and other containers requiring an imprint rate of 7,000 per hour. *Personnel:* A. Saraceni, W. V. Nocito, C. Comstock, E. Comstock. *Hotel:* Marlborough Blenheim.

**VERTROD CORP.** *Booth 658.* Exhibit of full line of thermal impulse sealers and trim sealers for sealing thermoplastic films; hand-, foot-pedal, power-operated pneumatic and electro-magnetic sealers; new heavy-duty sealers for making seals up to 96 in. long in films up to 10 mils thick. *Personnel:* A. Fener, S. Fener, L. Gross, N. Langer, A. Crupi, Jr. *Hotel:* Empress Motel.

**WEBER MARKING SYSTEMS, INC.** *Booth 148.* Display of hand-print devices used to address multiple carton shipments and to mark cartons with product identification and contents information; label-printing machines, typewriter-size, that print, cut, count and stack labels at 105 per minute; portable tabbing machines used for placing stencils over invoice forms without removing backing sheet; label-paper stocks including gummed, ungummed, dry gummed, pressure sensitive and linen; also marking inks for all surfaces. *Personnel:* J. Weber, C. E. Ritter, J. B. Crassweller, T. C. Wagner, J. Hawkins, A. C. Steinberger, H. Bearman, F. Italiano, H. Roberts, T. Howley, J. Marchesani, T. Sullivan, M. Bristol, J. Howley, S. Warren, D. Day, A. Feldman. *Hotel:* Dennis.

**WEST INSTRUMENT CORP.** *Booth 1220.* Temperature controls for packaging to be on display. *Personnel:* W. C. West, A. M. Willen. *Hotel:* Traymore.

**WEST VIRGINIA PULP & PAPER CO.** *Booths 235, 237, 241.* Joint exhibit of Multiwall Bag Div., Hinde & Dauch Div., Kraft Div. Sales, Bleached Board Div. and Virginia Folding Box Div. featuring Wonderwall multiwall shipping sack made from Clupak extensible paper; M/R-board moisture-resistant corrugated shipping container; Clupak stretchable paper; Dura-Bend liner; Brite-Pak enamel coat; folding cartons for a wide variety of industries, particularly the tobacco industry. *Personnel:* D. L. Luke, III, J. D. Cowan, W. L. Jennings, F. Thompson, G. Otto, R. Ketrick, V. S. Luke, S. Y. Carnes, J. M. Elsas, A. M. Kaiser, J. A. Bradnick, R. W. D'Ambry, R. Walwer, S. C. Norris. *Hotel:* Dennis.

**WESTERN PRINTING CO.** *Booth 1022.* Display of packaging designs; color lithography; heat-seal coatings; thermoplastic vacuum-formed blisters; contract packaging of printed-card package and blister. *Personnel:* N. A. Bruml, P. Jurick, H. S. Klein, W. Offenberg, H. Ostrow. *Hotels:* Claridge, Shelburne.

**WEYERHAEUSER CO.,** Silvatek Div. *Booth 1512.* Full-size examples of Ply-Veneer panel material used by manufacturers of modular packaging systems, Klimps fasteners, expendable pallets, storage vaults; uses of Ply-Veneer for electronics, electrical appliances and other industrial packaging; samples and specification literature on the Silvatek Ply-Veneer line available. *Personnel:* D. Anderson, H. McCorkle, R. Malhotra, T. Bowman, R. Hill, P. Jensen.


**WOLVERINE PAPER CONVERTING MACHINE CORP.** *Booth 634.* Photographs of standard and new equipment to be featured. *Personnel:* H. Nagel, A. Dudas. *Hotel:* Ambassador.

**WOOD CONVERSION CO.** *Booth 134.* Complete line of Tufflex and Tufflex-fabric packaging materials for pressure, absorption, surface and flotation cushioning. *Personnel:* W. W. McCarthy, J. Foeller, C. E. Swanson, A. J. Withoff, W. G. Wolston, K. C. Lindley, R. C. Raymond. *Hotel:* Shelburne.

**WRAP-ADE MACHINE CO.** *Booth 365.* Exhibit of unit-packaging machinery for strip packaging of tablets and unit packaging of powders, liquids and solids. *Personnel:* A. M. Powell, R. F. Freebody. *Hotel:* La Concha.

**YORK TAPE PRINTERS, INC.** *Booth 139.* Display of complete line of printed pressure-sensitive tapes and dispensers for industrial and commercial use; demonstration of can bundler, illustrating use of printed pressure-sensitive material to package and promote sales; expanded line of printed and die-cut pressure-sensitive labels in roll and sheet form, single and multicolor; both automatic and manual dispensing methods will be shown. *Personnel:* R. B. Smith, J. W. Gingerich, R. B. Wallace, Jr., R. W. Lockhart. *Hotel:* Dennis.





*from now on,*  
**you get  
twice  
as much**

Plastic Horizons' new branch plant in Batavia, Illinois will serve the ever-expanding economy of the mid-west and bring to all our customers everywhere the advantages of two plants instead of one—twice the facilities, twice the distribution, twice the shipping speed.

Now, no matter *where* you are, you can depend on Plastic Horizons' quality...

Polyethylene film that is sparkling clear, easy to handle.

Slip and strength to fit your exact requirements.

Sizes up to 60" wide (tubing to 60", edge slit to 120"). All gauges, down to .0003".

Light gauge sheeting in gauges down to .0005" and widths up to 54".

For prompt information concerning your polyethylene problem, write to

## Plastic Horizons, Inc.

Extruders of Quality Polyethylene for Packaging

1 Erie Street, Paterson, New Jersey

N. J. Phone ARmory 8-2000

N. Y. Phone CHickering 4-1285

Batavia, Illinois Phone TRemont 9-1090

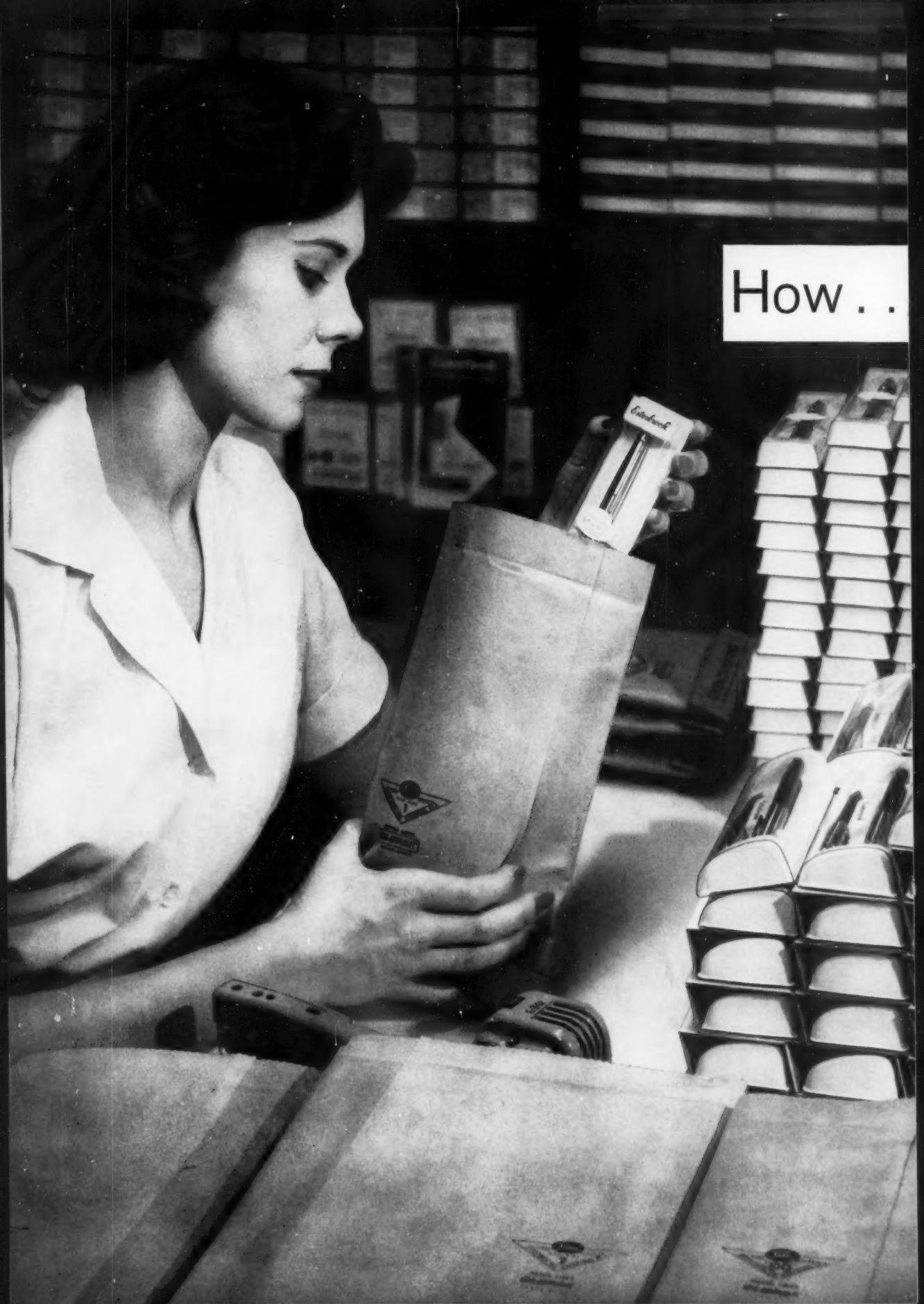
Chicago, Illinois Phone AUstin 7-8326

Big enough to serve you... small enough to know you.





How . .





## ... KRAFTSMAN CLUPAK\* PAPER

# helps **ESTERBROOK PENS** go places safely

The Esterbrook Pen Company, which guarantees the quality of its products, ships a multitude of individual pens, spare parts, and accessories in its expanding and world-wide distribution.

West Virginia's Kraftsman Clupak extensible paper has reduced shipping damage—and cut packing time by 50%.

Until a year ago, packing was a tedious operation. The shipper had to wrap each article, place it in a box, cover the box with a corrugated wrap, and then cover the whole with an outside paper wrap. In some cases *two* boxes were used, one inside the other. But damage remained a problem.

Today, it's far simpler and faster. Jiffy Bags, made with an outer layer of Kraftsman Clupak paper, cut handling time in

half. The shipper wraps the article once, slips it into a Jiffy Bag, staples the bag shut—and it's on its way.

What's more, Kraftsman Clupak paper offers such protection that shipping damage is now virtually nil. That's because it has a *built-in stretch* that withstands rough handling far better than old-fashioned kraft. Pioneered by West Virginia, this new, tougher paper offers almost endless opportunities for *money-saving* or *money-making* converting uses.

For full information about Kraftsman Clupak—and our “free bonus” of superior technical assistance—write or call: Kraft Division Sales, West Virginia Pulp and Paper Company, 230 Park Avenue, New York 17, N. Y.



**West Virginia**  
**Pulp and Paper**

\*Clupak, Inc.'s trademark for extensible paper, manufactured under its authority and specifications.



# Classified Advertisements

Employment  
Business Opportunities  
Used or Resale Equipment

## Machinery and Equipment For Sale

**FOR SALE—JOHNSON AUTOMATIC** Sealer. Old but rebuilt and in good condition with motors. 2 each Fuller automatic net weighers and syntron feeders. Weighers alternate to give speeds of approx. 30-1 lb. lawn seed units per minute. Write for box sizes and price. The Livingston Seed Company, 840 Kinnear Rd., Columbus 16, Ohio.

**R. A. JONES CONSTANT MOTIONER** Carton #632, 2 button control station; carton counter; leaflet folder; handles vials 4 1/2 to 20 cc rate of 200/min; vari. speed; equipped for brochure insertion and carton imprinting. Original cost \$11,658.00. S.P. \$3500.00—R. A. Jones auto. constant motion cartoner #S-832, w/brochure insertion device, carton imprinter & change parts w/motors. Original cost \$15,871.00. S.P. \$6000.00 Call—write—phone: Ace Processing Co., 6825 S. Kenwood, Chicago, Ill. Mu-4-3380.

**FOR SALE—SEMI AUTOMATIC** New Jersey Combiner Mounting Machine. Model 352 C with Push Feed and Centralizing Station. Foot Switches, 220/60/3 hp motors. 1 1/2 years old. Maximum size 1 1/4" x 22. Spring House Novelties, Inc., Springfield, Massachusetts.

**CARTON SEALER-FILLER—J. L. Ferguson** Company Double Sealer with Integral Volumetric Filler for speeds of 60 Glue-End sealed filled packages per minute. Carbons placed on forms by hand. All other operations automatic. Present carton size 1 1/2" x 3 1/2" x 6". An exceptional opportunity. Reasonable. Address inquiries to Box 1202, Modern Packaging.

**MODERN PACKAGING AND FOOD PROCESSING MACHINERY—Package Machinery** Models FA, FF, FA2, FA3 and FA4 Wrappers with and without Electric Eyes, also Models F and CM 2. Hudson Sharp Campbell Models 2W6, 2W8 and 2W10 Wrappers. Hayssen Wrappers, all sizes, for cellophane and polyethylene. Wel King Model DW-4 with Electric Eye and Marker. Scandia SFS-6F High Speed Automatic Wrapper. Pneumatic Scale Automatic Carton Feeder, Bottom Sealers, Wax Liners and Top Sealing Units with interconnecting conveyors. Pneumatic Scale Tie Wrap Machine and Large and Small Liners. Transwrap Machines, Model A Auger, Model A four side and also Triangle Model L-1 with Scales. Ceco Model 40 and A 3901-12 Cartoning Machines. Package Machinery Model F10-J Bundler. Standard Knapp, Ferguson, A-B-C Case Sealers. Resina Model RU-120 Automatic Capper. Battle Creek Model 48 Wrapper. Fillers, Labelers, Cappers, Mixers, Grinders. Complete Details and Prices Available on Request. Union Standard Equipment Company, 318 Lafayette Street, New York 12, N. Y. Phone: CAnal 6-5334.

## Machinery Wanted

**MACHINERY WANTED—Simplex** center seam polyethylene bag machine and paper sheeter with electric eye and layboy. Reply Box 1196, Modern Packaging.

## Help Wanted

**MANUFACTURER'S AGENTS WANTED—**Exclusive territories remain to sell modern and rapidly growing line of packaging machines: carton set-up, top sealers, automatic and semi-automatic case packers, coupon placer, carton inspection, modular conveyor, etc. Commissions only. Good advertising backing. Describe area covered and all lines presently carried. Reply Thiele Packaging Machinery Company, 1000 Berry Avenue, St. Paul 14, Minnesota.

**PACKAGING ENGINEER—Packaging Engineer** to plan automatic carton machinery installations and direct the preparation of construction drawings and specifications. Write G. E. Morrison, Kellogg Company, Battle Creek, Michigan.

**REPRESENTATIVES WANTED—Experienced** Sales Reps. wanted by established Polyethylene Bag Mfr. All territories open. Commission basis. Koby Bag Co., 68 Third St., Brooklyn 31, N.Y. TRiangle 5-0795.

**PLASTIC SALESMAN WANTED—Progressive** Company expanding into plastic bottle business wants a metropolitan New York salesman. Experience in blow molding preferred. Salary open. Send resumes to Box 1195, Modern Packaging.

## PACKAGING PERSONNEL

Positions filled and secured. A confidential Nationwide Service for employers seeking personnel and individuals seeking new positions. Inquiries invited. Reply to Graphic Arts Employment Service, Est. 1952, Helen M. Winters, Manager: Dept. PAC-3, 307 East 4th Street, Cincinnati 2, Ohio. Phone CHerry 1-2201.

**PACKAGE DESIGNER—Major** supplier of plastic packaging needs bright creative designer to direct growing design center. Please send resume, salary requirements, examples to Box 1208, Modern Packaging.

**MACHINE DESIGNERS—Expanding** organization requires engineers with experience, capable of handling all phases of machine design, from original conception thru final design. Engineering knowledge should cover mechanical, electrical, and preferably also electronic designs and components. Age—25 to 45. Prior experience in packaging machinery desired. College education preferred but not essential. Must be capable of competent board work. Submit resume leading to personal interview. Battle Creek Packaging Machine, Inc., Battle Creek, Michigan.

**YOUNG AGGRESSIVE FLEXOGRAPHIC & Gravure Ink Maker.** Complete charge production & development. Division of moderately large printing ink manufacturer. East Coast location. Opportunity to grow with young company. Reply to Box 1197, Modern Packaging.

**REPRESENTATIVES, JOBBERS** and Salesmen with good following in polyethylene bags, liners and film, in New York and Eastern States—wanted. We extrude our film, print and manufacture bags and liners. Good opportunity for right people. All replies will be held strictly confidential. Reply Box 1198, Modern Packaging.

**CHIEF ENGINEER AND MANAGING DEVELOPMENT ENGINEER** Due to promotions, there are two positions open in a major operation of America's most exciting Corp. Major Products: Agricultural, canning, carton, warehouse, and restaurant equip. Seeking applicants for Chief Engineer's position who can direct Development Eng. in machinery design. Supervisory experience desirable, but not essential. Need leader more than inventor type. Real opportunities to develop into top-notch Corporate Executive through practical training and formal college executive programs. The Managing Development Engineer will supervise the Can Handling and Warehouse Equip. programs. This is a new field with tremendous possibilities. Need a take-charge Engineer with some creative ability. Small mid-western town of 6,500. Good schools, churches, park, country club. Two hrs. from Chicago, one hr. from Purdue U. and U. of Ill. Contact R. F. Hartman, Personnel Mgr. Canning Machinery, Div., Food Mach. Chem. Corp., Hoopeston, Ill.

**MARKET DEVELOPMENT OPPORTUNITY**—New plastic packaging and cushioning products by progressive and expanding company requires experienced capable man to head up this division. Please reply to Box 1194, Modern Packaging.

**DEVELOPMENT ENGINEER—Here** is a top opportunity for a graduate Ch.E. experienced in polyethylene extrusion to join the research and development team of a growing national flexible packaging manufacturer. The man hired will be responsible for operation and development work for a pilot plant extruder. Salary open. Write Don McConnell, giving full details. The Rap-in-Wax Company, 150-26th Ave. S.E., Minneapolis 14, Minn.

**CREATIVE PACKAGING SALESMAN** One of the country's leading manufacturers of fine gift boxes, folding cartons and merchandising displays, having a wide range of diversified manufacturing facilities enabling them to produce an unlimited variety of provocative and sales stimulating packages and displays, seeks a thoroughly experienced top-notch salesman with successful record. The man we are looking for must be one of the best in the business, but may be limited in scope by his company's lack of diversification. Salary or drawing account commensurate with ability. Reply Box 1204, Modern Packaging.

**SALES MANAGER—Opportunity** for energetic, imaginative man, thoroughly familiar with food industry, to direct sales of new plastic food packaging for major New York packaging firm. Please send detailed resume, salary requirements. Reply Box 1207, Modern Packaging.

**MID WEST GRAVURE INK SALESMAN—A** leading manufacturer of quality inks for gravure application located in eastern Pennsylvania has an opening for a salesman experienced in this line. Midwest territory. We prefer a man residing in and with experience in that area. This is an excellent opportunity such as is seldom offered. All replies will be strictly confidential. Write full qualifications to Box 1213, Modern Packaging.

## Situations Wanted

**PACKAGE DESIGN—PROD. DEVELOPMENT—**Young man, 7 years experience structural and surface design of folding and corrugated containers, including 2 1/2 years product and mechanical development for automatic packaging machinery installations. Liaison between sales, production and customer. Desire challenging position with career opportunity. Full particulars on request. Reply Box 1199, Modern Packaging.

**ART DIRECTOR or CHIEF DESIGNER—**Packaging and Industrial Designer seeks creative position. Talented, creative, mature. Bauhaus educated. Swiss, 8 years in U.S. Fourteen years experience in Creative Package Design, Product Styling, Graphics. Also experienced in Planning and Sales. Fluent multi-lingual. Will relocate for right job. Reply Box 1201, Modern Packaging.

**I AM LOOKING** for an opportunity to put to work my 15 yrs of successful experience as a manufacturer of mass produced consumer packaged products (both brand & private label). My experience includes machine design, pressure sensitive tape production, paper & textile converting, rotogravure printing, product packaging & industrial engineering. Resume on request. Reply Box 1206, Modern Packaging.

## Miscellaneous

**WANTED BY PRINCIPAL—Purchase** going custom or contract packaging business. Detail facilities and terms. All replies handled with strict confidence. Reply Box 1200, Modern Packaging.

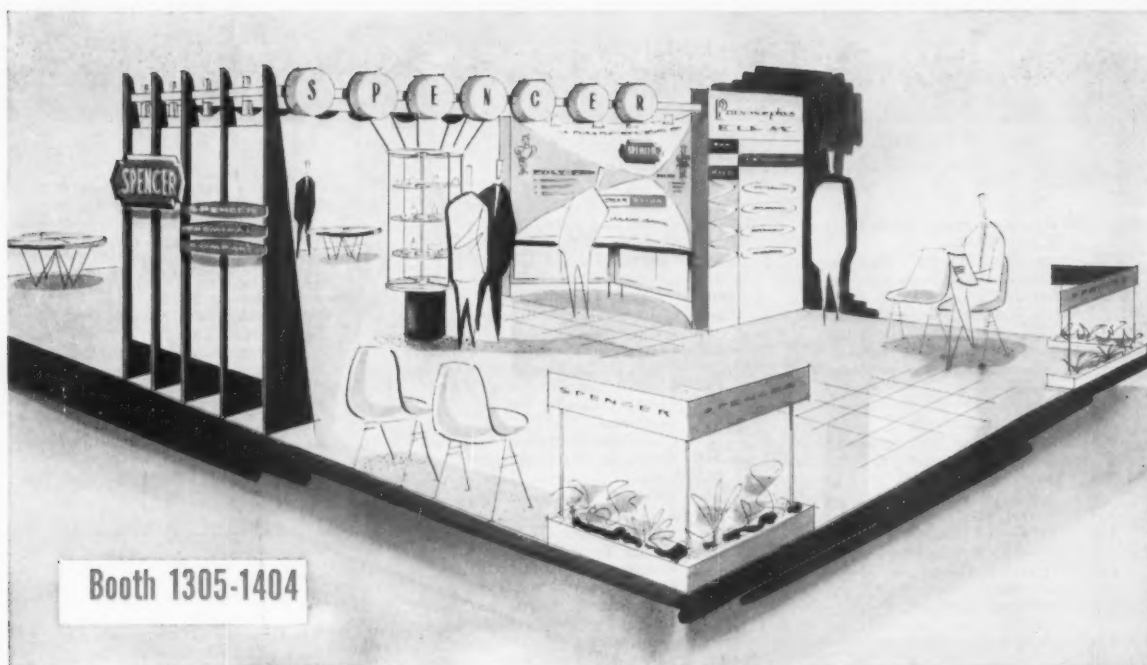
**WANTED—CONTRACT PACKING—One** of the South's finest equipped plants, with fully automatic equipment, experienced personnel and large, modern warehouse facilities is seeking contract packing. Can handle both rail and LCL shipments. For full information contact Dairy Products Company, 1622 2nd Avenue, South, Birmingham, Alabama.

**TRANSPARENT PACKAGING—CONVERTING PLANT** Operating 24 hours a day, multi-color printing and bag-making, cellophane and polyethylene. Located in desirable, fast expanding area—no local competition. Modern equipment; quarter-million volume. Forced to sell because of owner's impaired health. \$135,000.00. Reply Box 1205, Modern Packaging.

## RATES FOR CLASSIFIED ADVERTISING

ALL CLASSIFIED ADVERTISEMENTS PAYABLE IN ADVANCE OF PUBLICATION  
Closing date: 26th of second preceding month, e.g., February 26th for April issue.  
Per inch (or fraction) ..... \$30.00. Each 3 inches or fraction (boxed) \$15.00 extra.  
Situations Wanted ads ..... 1/3 of above rates.  
For purpose of establishing rate, figure approximately 50-55 words per inch.  
Address all communications to Classified Advertising Department,  
Modern Packaging, 575 Madison Avenue, N. Y. 22, N. Y.  
Modern Packaging reserves the right to accept, reject or censor classified copy.





Here's what to look for at the National Packaging Exposition, April 4-7 in Atlantic City. This artist's sketch

shows the idea-filled Spencer Chemical Company exhibit (No. 1305-1404) at Convention Hall.

**Exclusive! At Spencer's NPE exhibit . . .**

## See Dramatic Demonstration Of New Polymorphous Polyethylene Film

**Film made from new Spencer resin to be shown in action in form and fill machine. New packages made from "Poly-Eth," "Poly-Pro" and Spencer Nylon also to be featured.**

You've heard about Spencer's exclusive new polymorphous polyethylene . . . now you can see it for yourself. Spencer Chemical Company's\* exhibit at the National Packaging Exposition will feature a variety of commercial applications of the unique "Poly-Eth" 5300 Series resins that combine both toughness and sparkle in a single packaging film. See this film in action. A form and fill machine will be in operation during the show.

Printed film samples will be available.

Also on display will be such new packaging developments as:

- (1) Frozen food packaging.
- (2) The latest in garment bag and overwrap applications.
- (3) Examples of film made from Spencer "Poly-Pro" Polypropylene and Spencer Nylon.

- (4) Blown bottles, coated paper, plus many other new packages.

Spencer's packaging experts will be on hand to answer your questions. So, be sure to see Spencer's exhibit at the show. You'll be mighty welcome!

\*"Poly-Eth" and "Poly-Pro" are registered trademarks of Spencer Chemical Company.



**Poly-Eth**



**Polyethylene**

SPENCER CHEMICAL COMPANY, DWIGHT BLDG., KANSAS CITY, MISSOURI



# Index to Advertisers

March 1960

Distribution of this issue: 33,200

- |  |  |   |
|--|--|---|
| 355 A-B-C Packaging Machine Corporation                                | 100 Chase Bag Company  | FMC Packaging Machinery Div.                                  |
| 247 Acme Backing Corporation   | 117 Chaspec Mfg., Company, The   | 79 Hudson-Sharp Plant   |
| 314 Acme Gravure Services, Inc.  | 302 Chicago Gasket Co.   | 255 Simplex Plant   |
| 12 Acme Steel Company  | 317 Chicago Molded Products Corp., Campeco Div.                          | 316 Farrington Packaging Corporation                          |
| 223 Allen Hollander Co., Inc.  | 331 Chippewa Paper Products Co., Inc.                                    | 308 Faustel Engineering, Inc.                                 |
| Allied Chemical Corporation  | 307 Claremont Flock Corporation  | 54 Fenwal, Inc.   |
| 242, 243 General Chemical Division                                     | 284, 285 Clark, J. L., Manufacturing Co.                                 | 357 Ferguson, J. L., Company                                  |
| 197 Semet-Solvay Petrochemical Division                                | 339 Clark-Aiken Company, The   | 225 Flex-O-Glass, Inc.  |
| 85 Aluminum Foils, Inc.  | 297 Clarke Can Co., Inc.   | 302 Flex Products Corporation                                 |
| 360 Amaco, Incorporated  | 378 Classified   | 309 Foilcraft Printing Corp.                                  |
| 248 American Bag & Paper Corp.   | 71 Cleveland Container Co., The  | 47 Foxon Company, The   |
| American Can Company   | 112 Clybourn Machine Corp.   | 225 Frank, Walter, Organization, The                          |
| Bradley Sun Div.   | 224 Coated Products, Inc.  | 110 Fuller, H. B., Co.  |
| 9 Canco Division   | 346 Colonial Applicator Co.  |   |
| 58, 59 Marathon Division   | 334 Colt Packaging Machinery Co.   |   |
| 140 American Cyanamid Company, Plastics and Resins Div.                | 324 Colton, Arthur, Company  |   |
| 275 American Flange & Manufacturing Co. Inc.                           | 262 Comet Industries   |   |
| 283 American Management Association                                    | 362 Conapac Corporation  | 297 Geissel Mfg. Co., Inc.                                    |
| 278 American Partition Co.   | 264 Consolidated Packaging Machinery Corp.                               | 286 General Corrugated Machinery Company, Inc.                |
| 18 American Steel Foundries, Diamond Chain Company, Inc., A Subsidiary | 287 Container Corporation of America                                     | 82, 83 General Printing Ink Div., Sun Chemical Corp.          |
| 234 Ampoule Machine Co.  | 347 Container Equipment Corporation                                      | 355 Gilbert Plastics, Inc.                                    |
| 237 Amsco Packaging Machinery, Inc.                                    | Back Cover Continental Can Company, Flexible Packaging Div.              | 251 Gilman Paper Company                                      |
| 113 Anaconda Aluminum Company  | 318 Count-O-Matic Division, U. S. Engineering Co.                        | 1 Goodyear Tire & Rubber Co., The, Packaging Films Dept.      |
| 198, 199 Anchor Hocking Glass Corporation                              | 274 Crescent Ink & Color Co.   | 333 Gottscho, Adolph, Inc.                                    |
| 330 Apex Machine Co.   | 61 Crocker, H. S., Co., Inc.   | 331 Gray Company, Inc.  |
| 137 Arenco Machine Company, Inc.                                       | 7 Crown Cork & Seal Co., Inc.  | 332 Griffin-Rutgers, Inc.                                     |
| 11 Armstrong Cork Company  | 75 Crown Zellerbach Corporation Western-Waxide Div.                      |   |
| 291 Artcote Papers, Inc.   |  |   |
| 76 Atkron, Inc.  | 15 Davis, Joseph, Plastics Co.   | 319 Hamersley Mfg. Co., The                                   |
| 26 Auto-Vac Company  | 22, 344 Dennison   | 281 Hassler, W. Scott, Associates                             |
| 80, 81 AviSun Corporation  | 318 Dependable Compressor & Machine Co., Inc.                            | 353 Hayssen Manufacturing Co.                                 |
|  | 88 Derby Sealers, Inc.   | 30 Hedwin Corporation   |
|  | 18 Diamond Chain Company, Inc., A Subsidiary of American Steel Foundries | 94 Heekin Can Co., The  |
| 139 Baldwin-Lima-Hamilton, Industrial Equipment Div.                   | 86, 87 Diamond Plastic Industries Inc.                                   | 350 Heinrich Equipment Corp.                                  |
| 221 Ball Brothers Company, Inc.  | 301 Dillon-Beck Manufacturing Co.  | 32 Hercules Powder Company                                    |
| 23 Bartelt Engineering Company   | 5 Dobeckmun Company, The, a Division of the Dow Chemical Co.             | 98 Hinde & Dauch Division of West Virginia Pulp and Paper Co. |
| 300 Battle Creek Packaging Machines, Inc.                              | 356 DosaMatic Dropper Corp.  | 240 Hobbs Manufacturing Co.                                   |
| 229 Berles Carton Co., Inc.  | 109 Doughboy Industries, Inc., Mechanical Div.                           | 231 Hoerner Boxes, Inc.                                       |
| 125 Bernardin Bottle Cap Company, Inc.                                 | 35 Dow Corning Corporation   | 254 Honeywell   |
| 230 Biner-Ellison Machinery Co.  | 215 Dunning, J. H., Corporation  | 103 House of Harley, Inc., The                                |
| 334 Bivans Corporation   | duPont de Nemours, E. I., & Co. (Inc.)                                   | 263 Howell, F. M., & Co.                                      |
| 256 Bliss, E. W., Company  | 312, 313 Film Dept., Cellophane  | 361 Huber, J. M., Corporation                                 |
| 120 Bradley Associates, Inc.   | 381 Film Dept., Celo-Seal  | 79 Hudson-Sharp Plant, FMC Packaging Machinery Div.           |
| 258, 259 Bradley Sun, Div. of American Can Company                     | 46 Film Dept., Mylar   |   |
| 56 British Cellophane Limited  | 95 Dusenbery, John, Co., Inc.  | 337 Industrial Marking Equipment Company, Inc.                |
| 16 Brockway Glass Company, Inc.  | 311 Dyn Corporation  | 374 Injection Molders Supply Co.                              |
| 269 Brown Company  |  | 62 Inland Container Corp.                                     |
| 293 Bunn, B. H., Company   |  | 235 Intaglio Service Corporation                              |
| 195 Burt, F. N., Company, Inc.   |  | 222 Interchemical Corporation, Printing Ink Division          |
|  |  | 77 International Paper Box Machine Company                    |
|  | 28, 29 Economic Machinery Company, Div. of Geo. J. Meyer Mfg. Company    | 307 Island Equipment Corp.                                    |
| 371 Calumet Carton Co.   | 238 Elgin Manufacturing Company  | 138 Ivers-Lee Company   |
| 37 Cameo Die & Label Company   | 72, 73 Enjay Co., Inc.   |   |
| 33 Cameron Machine Company   | 332 Erdeo Engineering Corp.  |   |
| 31, 305 Celanese Corp. of America, Plastic Division                    | 263 Errich International Corp., Packaging Division                       |   |
| 343 Cel-Fibe Division, Personal Products Corp.                         | 308 Essex Plastic Machinery Co., Inc.                                    |   |
| 17 Cellu-Craft Products Corporation                                    | 271 Ever Ready Label Corporation   | 34 J-E. Plastics Mfg. Corp.                                   |
| 92, 93 Celluplastic Corporation  | 21 Extruded Plastics, Inc.   | 239 Jackmeyer Corp., The                                      |
|  | 40 Extrudo-Film Corporation  | 121 Jones, R. A., & Company, Inc.                             |

(Continued on page 382)



# Now you can tamperproof your aerosol container with a Du Pont "Cel-O-Seal" Band

*Here are the important protective  
and merchandising advantages this new,  
sealed container provides:*

- Ends casual sampling, cap switching and in-store damage.
- Protects product quality and full content from packaging line to consumer.
- Builds consumer and retailer confidence.
- Helps get your food, drug and household products into more self-service stores.
- Cuts costs. Newly designed single-shell cap, plus "Cel-O-Seal" band, costs less in most cases than old-style, unprotected double-shell cap.
- Gives extra labeling space.
- Has design flexibility. "Cel-O-Seal" band can be printed in one or a combination of eye-catching colors to complement your package design.



REG. U. S. PAT. OFF.  
BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

**CEL-O-SEAL BANDS**  
REG. U. S. PAT. OFF.



## MAIL COUPON TODAY FOR FULL FACTS!

E. I. du Pont de Nemours & Co. (Inc.)  
"Cel-O-Seal" Div. A  
River Road, Buffalo 7, N.Y.

Please have a Du Pont "Cel-O-Seal" representative  
contact me.

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Firm \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_



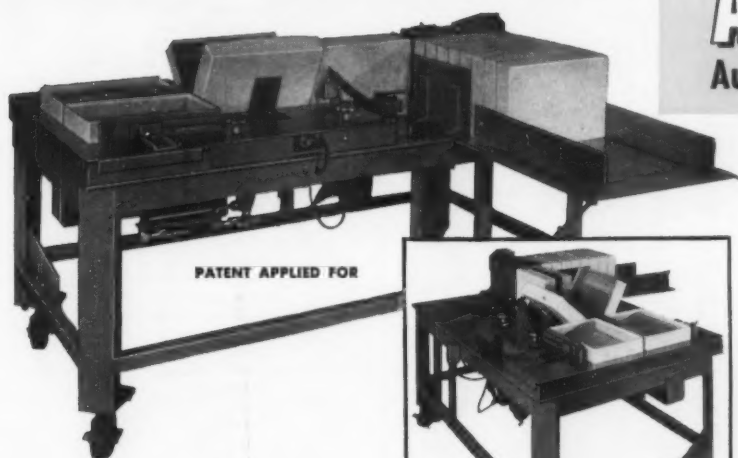
## MODERN PACKAGING



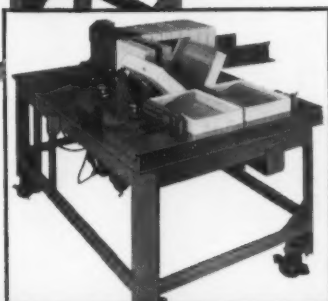
## FULLY AUTOMATIC

## THE KNOWLTON AUTOCLOSE

Automatic Setup Box Closer



PATENT APPLIED FOR



BROOKLYN  
45-53 Beaver St.

CHICAGO  
9 S. Clinton St.

TORONTO, CAN.  
888 Dupont St.

ROCHESTER 14, N.Y.

## REDUCE COSTS INCREASE OUTPUT

The new Knowlton Autoclose is a fully automatic setup box closer that automatically accepts the output of bases and covers (or lids) from two Automatic Wrappers and combines them. It will close boxes as fast as they are delivered from the Wrappers.

The setup time is short, and the parts necessary to change over from the largest box to the smallest box cost very little.

The Autoclose is controlled by air valves and cylinders exclusively. The approximate 25 lbs. of air pressure which is required is controlled by a regulator provided with the machine.

Autoclose will prove itself a cost saving addition to your Setup Box production line.

... Seriously considering  
**BLISTER PACKAGING?**



**P.I.** offers you a complete line of **BLISTER EQUIPMENT**

From semi-automatics to complete automation of form, fill and seal. For food, electronic parts, hardware, cosmetic items, etc. If your package requires a board, paper or film top P. I. has the right machine for your product requirements including a new "Stand-Up" package.

All of your **BLISTER PACKAGING PROBLEMS**  
can be solved by one stop at A.M.A.  
PACKAGING EXPOSITION, ATLANTIC CITY, N. J.

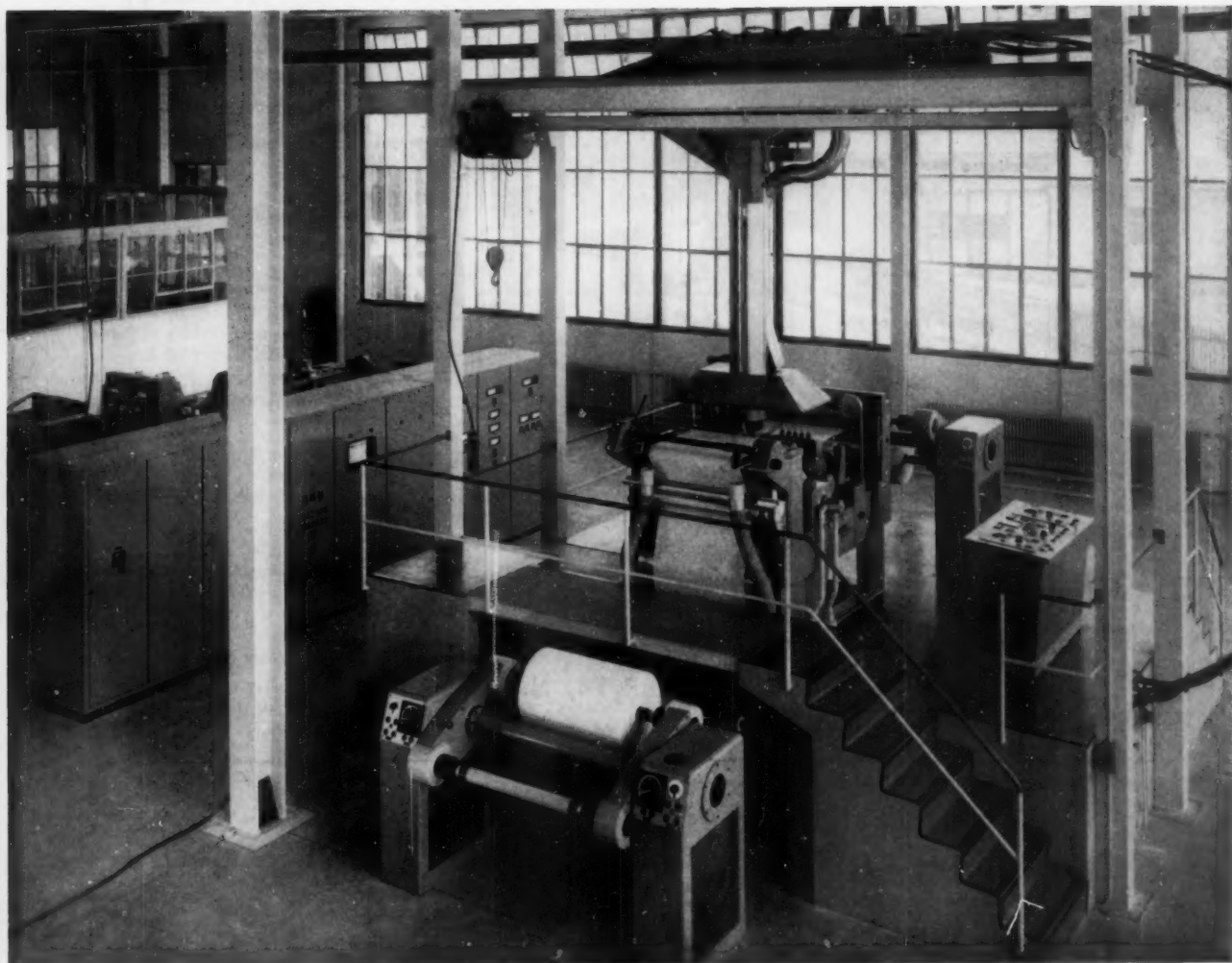
**BOOTH  
352**



**PACKAGING INDUSTRIES LIMITED, INC.**

151 PINE STREET, MONTCLAIR, NEW JERSEY





## Oerlikon Extrusion Coating Plant

A revolutionary new-construction designed to coat paper, aluminum- and cellophane-foils as well as textiles with thermo-plastics. Width between 40 and 100 cm (approx. 16"-40")

### MODEL PL 100

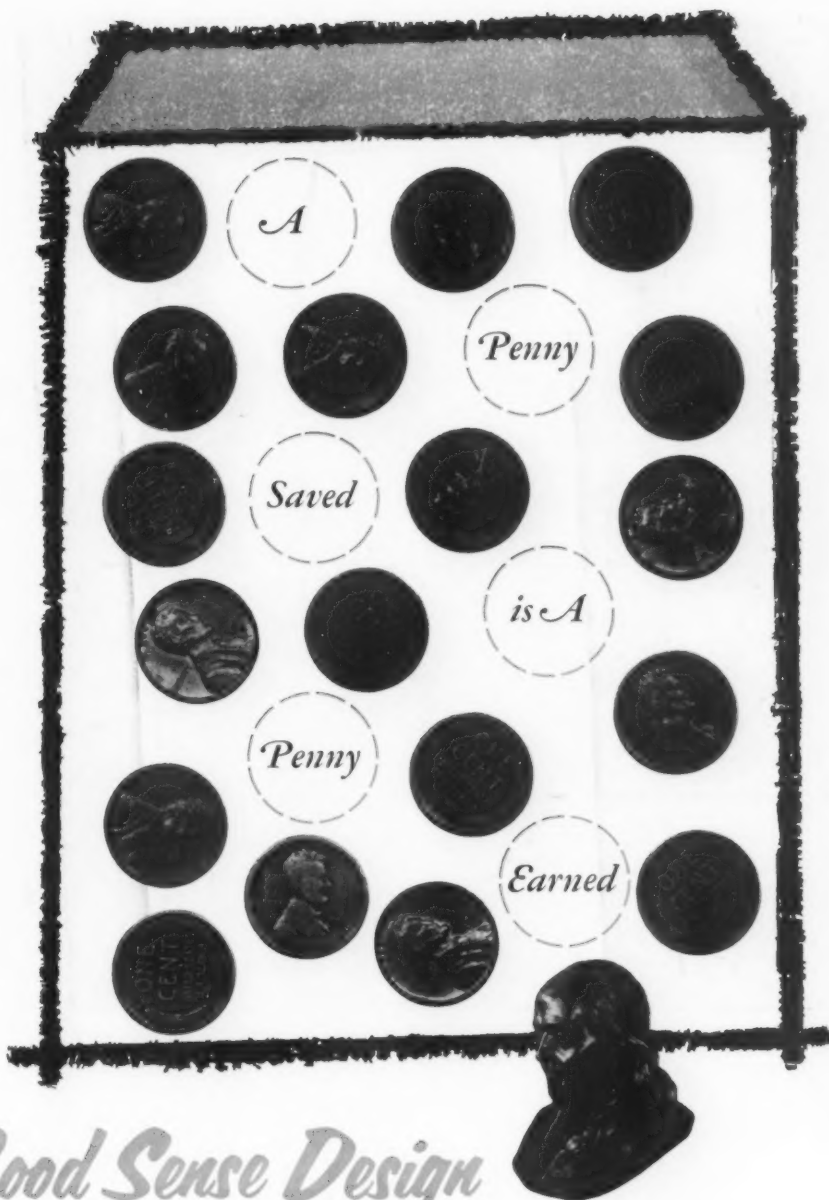
Suppliers of complete equipment, consisting of: vertical extruder with wide-slot nozzle; winding up / winding off machine; roller-stand with differential measuring equipment; control cabinets / switch panel (electronic control)

---

## Oerlikon Plastics LTD. STANS/NW Switzerland

---





*Good Sense Design*

**Takes CENTS out of Your Package!**

Pennies saved on the package are pennies added to the profit.

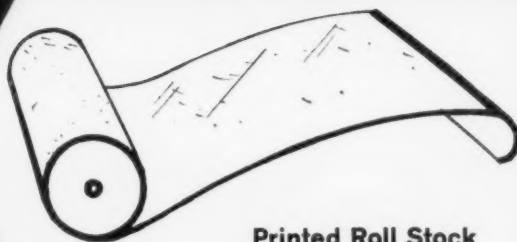
Penny-wise designers at Michigan Carton use your packaging money as if it were their own...yet create America's Most Reached For Cartons.

Michigan Carton makes its own paperboard of outstanding quality, produces cartons of distinctive design, and renders the kind of service you give to your own customers.



**MICHIGAN CARTON COMPANY** Battle Creek, Michigan





Printed Roll Stock



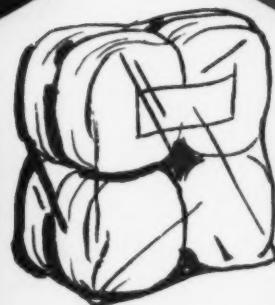
Flap-Over



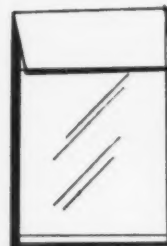
Zip-Cord

# FLEXIBLE PACKAGING DIVISION

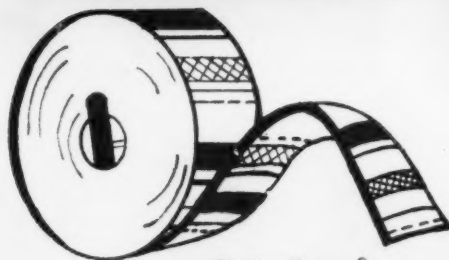
MT. VERNON, OHIO  
DEVON, PENNSYLVANIA  
SOUTH GATE, CALIFORNIA



Bun Bag



Side-Seal Bag



Rolla-Bags®

by Continental

**CONOLENE®** MAKES

**THE RIGHT POLYETHYLENE PACKAGE FOR YOU!**

Here's the industry's *clearest* and most complete poly packaging line...tailored to your specific requirements, made with more practical advantages, printed with more imaginative appeal!

*Remember . . . Continental also leads in laminations, film and paper conversion!*



